

# Corporate responsibility report 2022

7 March 2023







VR Group's purpose

**Getting there together for a better world**



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## Responsibility carries us forward even in exceptional times

In 2022, we celebrated our 160-year journey at VR Group. At the same time, global events raised concerns and caused great uncertainty. The COVID-19 pandemic was still a significant factor in the early part of the year, affecting people's travel behaviour. Russia's invasion of Ukraine at the end of February came as a shock to the world and also had a major impact on us at VR Group. The war has had extensive concrete impacts on VR Group. In addition to leading to the discontinuation of traffic at Finland's eastern border, the exceptionally high energy prices and general rise in prices were reflected in higher production costs for VR Group.

In these turbulent times, the significance of responsibility at the core of our strategy has been further emphasised, and we have continued our systematic efforts in that area. For VR Group, the key areas of responsibility are safety and security, customer orientation, employee experience, environmental responsibility and corporate social responsibility.

In 2022, we continued to invest in the health security of public transport, enabled affordable travel in spite of exceptionally high inflation, and created alternative transport chains in cooperation with industrial customers. This way, we have contributed to ensuring smooth logistics for Finnish industry even under exceptional circumstances and to making environmentally friendly public transport a feasible way for consumers to get around. We have been pleased to see the recovery of travel, particularly in domestic long-distance traffic, as the COVID-19 pandemic has gradually subsided. We believe that our investments in the customer experience have boosted the recovery, which culminated in a record-high number of 1.4 million journeys in July. The success of our efforts is also reflected in the general public's perception of VR Group's responsibility improving from 2021.

In addition to being characterised by an exceptional operating environment, 2022 was a historic year for us for other reasons. We welcomed 3,200 new colleagues to VR at the beginning of July, when Arriva Sverige AB was transferred to VR Group's ownership and renamed as VR Sverige. The transaction enabled us to expand our operations to contract traffic in Sweden. The acquisition also presents us with new opportunities with regard to our responsibility efforts. We will be able to increase our handprint in the market for environmentally friendly public transport and to be on the leading edge of the electrification of bus services in Sweden. As the integration of the Swedish subsidiary has not been fully completed yet, this report covers data on Sweden only to the extent that is possible and reasonable within this schedule, following the completion of the acquisition.

Due to the acquisition we made, 2022 was a natural time for us to start investing in leadership development and the strengthening of a values-based culture in cooperation with our personnel in Finland and Sweden, and we will continue these efforts in the years to come. As the first phase of our multi-year culture journey, we crystallised our shared values through a process that extensively engaged our personnel. Our values, which were decided together, are as follows: We care, We work together, and We drive improvement.

We issued our first green bond in 2022. The proceeds from the issue will be used for initiatives and projects that are aligned with VR Group's Green Finance Framework. The projects include investments in clean transport, renewable energy projects and improving the energy efficiency of buildings owned or occupied by VR Group. This way, we contribute to the objective of mitigating global climate change by reducing greenhouse gas emissions, producing renewable energy and saving energy.

While the past year was a difficult time for our personnel and our customers, we are very happy to say that we have engaged in a wide range of responsible and significant actions at VR Group. Our purpose, "Getting there together for a better world", is now more topical than ever, and it represents the core of our activities as we move forward.

**Elisa Markula**

President and CEO

**Maria Kuivaniemi**

Director of Sustainability

## Responsibility as part of our business operations

VR Group strives to be a pioneer in responsible business and to help its customers and stakeholders achieve their sustainable development goals. Our handprint is a key consideration in our approach to responsibility, which is also reflected in VR Group's purpose, "Getting there together for a better world". While VR Group develops its operations to reach a new level, we also build a more sustainable society. VR Group is committed to the Finnish Government's objectives for cutting emissions, according to which Finland will be carbon neutral in 2035 and carbon negative soon after that.

VR Group supports Finnish industry and enables smooth mobility for consumers. Since July 2022, we have also served consumers in contract traffic in the Swedish market. We develop our operations with a customer-oriented approach to be our customers' first choice and thereby get a growing share of people and goods travelling by rail. As rail traffic is an environmentally friendly and energy-efficient mode of transport, increasing the share of rail traffic has a positive impact on the climate.

## Material topics of responsibility

We updated our material topics of responsibility at the end of 2022. However, the Corporate responsibility report 2022 has been written based on the previous materiality analysis, according to which the key areas of VR Group's responsibility are environmental responsibility, safety and security, customer orientation, employee experience and corporate social responsibility. The process of updating the material topics indicated that our reporting on material topics is perceived to be comprehensive. Nevertheless, we recognised the need to revise our reporting going forward by grouping the material topics in a new way and highlighting our strategic responsibility priorities more clearly. We will discuss these priorities more comprehensively in our report on 2023.

We assessed the material topics of responsibility, shown in the table on the next page, in accordance with the GRI 2021 step-by-step process for assessing material impacts. We organised workshops, a stakeholder survey and stakeholder interviews, in which we engaged representatives from various stakeholder groups. We crystallised VR Group's values in 2022 through a process that extensively engaged our personnel. During the process to crystallise our values we also discovered responsibility themes that we were able to utilise in the materiality analysis. The views expressed by stakeholders provided the foundation for selecting the material topics and assigning priorities to them. The material topics of responsibility are approved by VR Group's Management Team and Board of Directors.

As the materiality analysis indicated, VR Group's activities may have both direct and indirect impacts on the human rights of various groups. The direct impacts concern our personnel and customers, while the indirect impacts concern our supply chains through business relationships. The most significant direct human rights impacts are related to the safety and security of our customers and personnel. With that in mind, we engage in continuous and systematic safety and security efforts. The non-discrimination and equality of our customers and personnel are also areas where direct human rights impacts are possible. We respect our employees' right to unionisation, and we do not tolerate any form of discrimination or harassment. We invest in enabling equal travel, for example, by continuously developing the accessibility of our physical and digital services.

## Results of the 2022 materiality analysis (1)

● Very high significance

● High significance

● Moderate significance

### Themes and impacts

#### Environment

##### Climate change

- Carbon handprint of own operations (2)
- Use of zero-emission energy & energy consumption
- Carbon footprint of own operations

##### Biodiversity & use of materials

- Use of materials and natural resources
- Supporting biodiversity and environmental protection (2)
- Supporting the circular economy
- Waste management

##### Other environmental impacts

- Environmental damage and leaks

#### Social

##### Safety and security

- Traffic safety
- Customer safety and security
- Occupational health and safety

##### Own employees

- Personnel diversity and engagement
- Employee rights (2)
- Employee competence development

##### End users of services

- Overall service development (e.g. innovative new solutions, digital development)
- Customer orientation
- Responsible pricing
- Customer data privacy

##### Human rights

- Human rights in own operations and in the value chain (2)
- Service availability and accessibility

#### Governance

##### Societal significance

- Ensuring industrial operational reliability (2)
- Data security
- Employment
- Supply chain management

##### Good governance

- Fair and transparent business practices
- Eradicating anti-competitive behaviour
- Anti-corruption activities
- Tax footprint

(1) Impacts with at least a moderate weight.

(2) New or more specific topic on the list of materiality.

## Responsibility management

Responsibility management is organised and integrated into VR Group's business operations by VR Group's Board of Directors, which approves VR Group's operating principles and key policies. Responsibility is an integral part of VR Group's strategy. Responsibility and the policies and commitments that guide responsibility have been integrated into day-to-day business operations, and their implementation is consistently evaluated in decision-making in all areas of VR Group.

VR Group's Management Team steers and monitors the development of key strategic projects related to responsibility. The Vice Presidents of the business units are responsible for implementing the responsibility objectives and separate responsibility projects within their organisations. Business-specific responsibility decisions are made at the business unit level. The responsibility efforts that are managed by VR Group's business units are supported in the various areas of responsibility by the sustainability team, the HR organisation and the safety and security organisation, which report to the Management Team on their activities. VR Group's top management introduces key responsibility impacts and the monitoring of responsibility performance to the Board of Directors for discussion.

Various areas of responsibility are incorporated into VR Group's incentive schemes. The key indicator is the high level of safety and security in VR Group's own operations, which is a reward criterion for all employees. The following table summarises the management of responsibility by area.

## Areas of responsibility at VR Group



### Safety and security



### Customer orientation



### Employee experience



### Environmental responsibility



### Corporate social responsibility

## Description of responsibility management <sup>(1)</sup>

VR Group's key areas	Safety and security	Customer orientation	Employee experience	Environmental responsibility	Corporate social responsibility
Management method and purpose	Page 17	Page 24	Page 31	Page 36	Page 48
	The purpose of the management method in each area of responsibility is to create the best conditions for implementing our organisation's responsibility promises, promoting the UN Sustainable Development Goals (2) and achieving the objectives.				
	Risk management is described in the Corporate Governance Statement, on page 5.				
Goals and indicators	Goals for the strategy period: <ul style="list-style-type: none"><li>• The railway safety incident frequency target for 2026 is 12</li><li>• The lost-time injury frequency target for 2026 is 5</li></ul>			Environmental goals for 2021–2025 are described on <b>page 37</b>	
	Key indicators of responsibility are described in the table on <b>page 12</b> .				
Feedback mechanisms	Safety observations and incident and accident reports	Customer surveys and studies	Personnel surveys	Environmental safety incident observations, reporting and investigation	Whistleblowing channel
		Net Promoter Score (3)	Performance reviews		Reporting of processed incidents received via the whistleblowing channel
	Investigation of incidents and accidents	Customer feedback	Team and unit meetings	Audits	
	Safety audits and risk assessments	Stakeholder collaboration, e.g. with associations representing people with disabilities			
	Safety committees and working groups engaging personnel				

(1) Describes responsibility management in VR Group, excluding VR Sweden, the integration of which had not yet been completed at the time of publishing this report.

(2) Sustainable Development Goals, SDG.

(3) Net Promoter Score, NPS.



## Description of responsibility management

VR Group's key areas	Safety and security	Customer orientation	Employee experience	Environmental responsibility	Corporate social responsibility
<b>Addressing deficiencies</b>	<p>Information related to safety and security is collected in an information system, which forwards safety observations and deviations to supervisors and specialists for processing. The reports are used to determine the measures to be taken, and their implementation is systematically monitored.</p> <p>Supervisors are responsible for investigating serious incidents and accidents, as well as significant near misses.</p> <p>In addition to regularly convened working groups focused on various aspects of safety and security, the personnel participate in the development of safety through risk assessments, safety briefings, observation rounds and the investigation of incidents and accidents, for example.</p>	<p>The results of customer surveys and studies and the Net Promoter Score (NPS) are analysed, and development measures are planned and implemented accordingly. The emphasis is on the measures that have the most impact and are the most meaningful for customers.</p> <p>All customer feedback is reviewed and responded to if the feedback requires it.</p>	<p>Team-specific and unit-specific development areas are selected by the team or unit in question, based on the results of the personnel survey. An owner is designated for each development area, and they are recorded in a system that is used to monitor their implementation.</p> <p>The issues highlighted in performance reviews are recorded in the personnel information system, and their progress is monitored in meetings between supervisors and employees and in the annual performance reviews.</p> <p>As a rule, memorandums are prepared on team and unit meetings, and the memorandums are subsequently used to monitor progress in the development areas.</p>	<p>Environmental observations and incidents are documented in an information system, which forwards the reports to supervisors and specialists for processing. The reports are used to determine the measures to be taken, and their implementation is systematically monitored. Feedback from customers is handled on a case-by-case basis.</p>	<p>A comprehensive investigation is carried out for all approved reports of suspected irregularities. All reports are treated confidentially.</p>

### Assessment of management practices

We assess our practices against the objectives based on performance and stakeholder feedback. We conduct both internal and external audits to evaluate our ways of working.

## Description of responsibility management

VR Group's key areas	Safety and security	Customer orientation	Employee experience	Environmental responsibility	Corporate social responsibility
<b>Policies and commitments</b> (4)	Safety and security strategy		Equality plan	Environmental management system	Code of Conduct
	VR Group's railway safety management system		Guidelines for preventing harassment and other inappropriate treatment	Environmental policy	Code of Conduct for Suppliers
	Infrastructure manager's safety management system		Well-being, health and occupational safety management system		Procurement guideline
	VR Group's data security policy		Code of Conduct		
	Data security management system				
	VR Group's well-being, health and occupational safety activities management system				

Our operations are guided by the UN Sustainable Development Goals.

VR Group joined the UN Global Compact initiative in 2020 and is committed to adopting, supporting and implementing the ten principles of the initiative. The starting points of the operations of VR Group are aligned with these ten principles, and we reported on our progress for the first time in summer 2021.

VR Group operates in accordance with the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work, the ILO conventions on the abolition of forced labour, the prohibition of child labour, the abolition of discrimination and the right to organise, and the ILO conventions on hours of work, occupational safety and occupational health.

VR Group has signed the FIBS Diversity Charter.

VR Group has a risk management policy, which includes the risk management principles, objectives, responsibilities and operating procedures to be followed.

(4) Applies to all VR Group companies; all key policies are approved by VR Group's Board of Directors. The environmental policy has been approved by VR Group's Management Team.

## Value creation model

### Our key resources

#### People

- Professional and motivated personnel, 6,846 FTEs
- Customers, partners and subcontractors

#### Intangible resources

- Brand and reputation: The fifth-most responsible brand in Finland
- Customer data and its utilisation
- Transport and traffic planning expertise
- Maintenance capabilities
- Environmental, occupational health and safety management systems
- Stakeholder networks

#### Financial resources

- Balance sheet EUR 2,365 million
- Equity ratio 53.5%

#### Production resources

- Fleet
- Properties
- Maintenance production factors
- Information systems and apps

#### External resources

- Purchases and investments
- Suppliers of goods and services
- Owner: Finnish state

#### Natural resources

- 100% of the electricity used is generated using renewable energy

### VR Group's operations

**The core of our business** is to provide our customers with high-quality, environmentally-friendly passenger and logistics services and maintenance of rolling stock. We mainly operate in Finland and Sweden. Operations in Russia were discontinued in 2022.

**Our purpose** – Getting there together for a better world

#### Operations are based on three business areas

##### VR

Passenger train services, Pohjolan Liikenne bus service, restaurant services, operation of the Tampere tramway, bus and rail services in Sweden

**VR Transpoint** Rail and road logistics

**VR FleetCare** Rolling stock maintenance and lifecycle services

#### In 2022, operations resulted in

**75.7** million journeys by rail in Finland

**41.6** million journeys by bus in Finland

**29.3** million journeys by rail in Sweden (07-12/2022) (1)

**36.0** million journeys by bus in Sweden (07-12/2022)

**11.5** million journeys by the Tampere Tramway

**29.7** million tonnes of freight by rail

**4.7** million tonnes of freight by road

Fleet maintenance, property development and property maintenance

#### Handprint

As a result of VR Group's existence, greenhouse gas emissions from traffic in Finland are approximately 0.5 million tCO<sub>2</sub>e lower, corresponding to the emissions of two cities the size of Vaasa

VR Group's operations are guided by the **UN Sustainable Development Goals** and **Objectives of ownership steering by the state**: "All state-owned companies must base their operations on corporate social responsibility. Companies must take into account in their decision-making the economic factors and the social and environmental impacts of their activities. Finland will be carbon neutral in 2035 and carbon negative soon after that."

### Outputs and impacts

#### For customers

- Mobility of people and goods
- Accessible and equal mode of transport
- Promoting the competitiveness of industry

#### For employees

- Meaningful work
- Livelihood
- Occupational safety and well-being

#### For society

- Taxes, dividends and other payments to the state
- Upholding the security of supply
- Payments to suppliers and partners
- Indirect impacts on third parties
- Joint development of the traffic system in collaboration with stakeholders

#### For the environment

- Reduction of traffic emissions and promotion of national climate goals
- Low-emission services
- Promotion of the circular economy and material efficiency

(1) The figures exclude Östgötapendeln journeys, for which data is not available



## Key indicators of responsibility

Area of responsibility and responsibility promise	Key indicators (1)	2022	2021	2020
<b>Safety and security</b> We ensure that people and goods reach their destinations in the safest way possible – safety is our way of doing things	Railway safety incident frequency (1/million hours worked)	<b>23.3</b>	28.9	22.5
	Lost-time injury frequency (1/million hours worked)	<b>8.6</b>	9.2	7.6
<b>Customer orientation</b> We are our customers' first choice	Net Promoter Score (NPS), long-distance train traffic	<b>42</b>	39	36 (2)
	Net Promoter Score (NPS), commuter train traffic	<b>23</b>	9	11 (2)
	Net Promoter Score (NPS), logistics	<b>12</b>	27	33
	Net Promoter Score (NPS), maintenance	<b>11</b>	-4	17
	Punctuality, long-distance train traffic, % (3)	<b>82.6</b>	86.9	88.6
	Punctuality, commuter train traffic, %	<b>94.7</b>	92.6	96.6
	Punctuality, rail logistics, %	<b>89.4</b>	87.1	90.4
	Customer punctuality of long-distance train traffic, % (3)	<b>81.2</b>	85.4	85.6
<b>Employee experience</b> Together we build an inspiring workplace where everyone thrives	Sickness-related absence, %	<b>4.8</b>	4.6	4.4
	Employee satisfaction, recommendation, scale 1–4	<b>2.8</b>	2.4	2.7
	Employee satisfaction, general feeling, scale 1–4	<b>– (4)</b>	2.4	2.5
	Employee satisfaction, leadership index, scale 1–4	<b>3.4</b>	3.1	3.2
<b>Environmental responsibility</b> We reduce the environmental impact of transport and the carbon footprint of society	CO <sub>2</sub> e emission intensity, passenger train services (g/pkm) (5)	<b>1.5</b>	2.2	2.3
	CO <sub>2</sub> e emission intensity, rail logistics (g/tkm) (5)	<b>5.7</b>	5.4	5.4
	Energy efficiency, passenger train services (Wh/pkm)	<b>85.3</b>	133.6	135.7
	Energy efficiency, rail logistics (Wh/tkm)	<b>47.5</b>	45.5	44.7
	Recycling rate (%)	<b>41</b>	65	65
	Chemical leakages (qty)	<b>0</b>	0	3
<b>Corporate social responsibility</b> We increase well-being in society	Number of journeys, passenger traffic, million journeys (6)	<b>194.1</b>	83.9	88.6
	Transported tonnes, freight traffic, million tonnes	<b>34.4</b>	42.7	41.5
	Tax footprint, taxes paid and accounted, total EUR million (7)	<b>117.6</b>	95.0	7.0

(1) VR Sweden is included in the figures only where specifically mentioned.

(2) The measurement method changed in 2021; comparable figures according to the new measurement method are indicated in the table.

(3) The punctuality rate indicates how often a train has arrived on schedule. The customer punctuality rate indicates how many customers reach their destination on schedule.

(4) Not measured in 2022.

(5) Passenger-kilometre (passenger-km, pkm) is a unit of measurement for passenger services, 1 pkm = a one-kilometre distance covered by one person. Tonne-kilometre (tonne-km, tkm) is a unit of measurement for freight traffic, 1 tkm = one tonne of goods transported for one kilometre.

(6) Incl. VR Sweden 1 July since 2022.

(7) Including all taxes, EUR 91.1 million paid to Finland in 2022.

## UN Sustainable Development Goals and Global Compact




VR Group's responsibility work is built on the UN Sustainable Development Goals. In 2020, we joined the Global Compact initiative that supports them, expressing our support for promoting human rights, labour rules, environmental protection and anti-corruption.

### Main UN goals for VR Group



<div> <div>13 CLIMATE ACTION</div>  </div> <div> <p>Take urgent action to combat climate change and its impacts</p> </div>	<div> <div>8 DECENT WORK AND ECONOMIC GROWTH</div>  </div> <div> <p>Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p> </div>	<div> <div>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</div>  </div> <div> <p>Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</p> </div>
<div> <div>10 REDUCED INEQUALITIES</div>  </div> <div> <p>Reduce inequality within and among countries</p> </div>	<div> <div>11 SUSTAINABLE CITIES AND COMMUNITIES</div>  </div> <div> <p>Make cities and human settlements inclusive, safe, resilient and sustainable</p> </div>	<div> <div>17 PARTNERSHIPS FOR THE GOALS</div>  </div> <div> <p>Strengthen the means of implementation and revitalize the global partnership for sustainable development</p> </div>

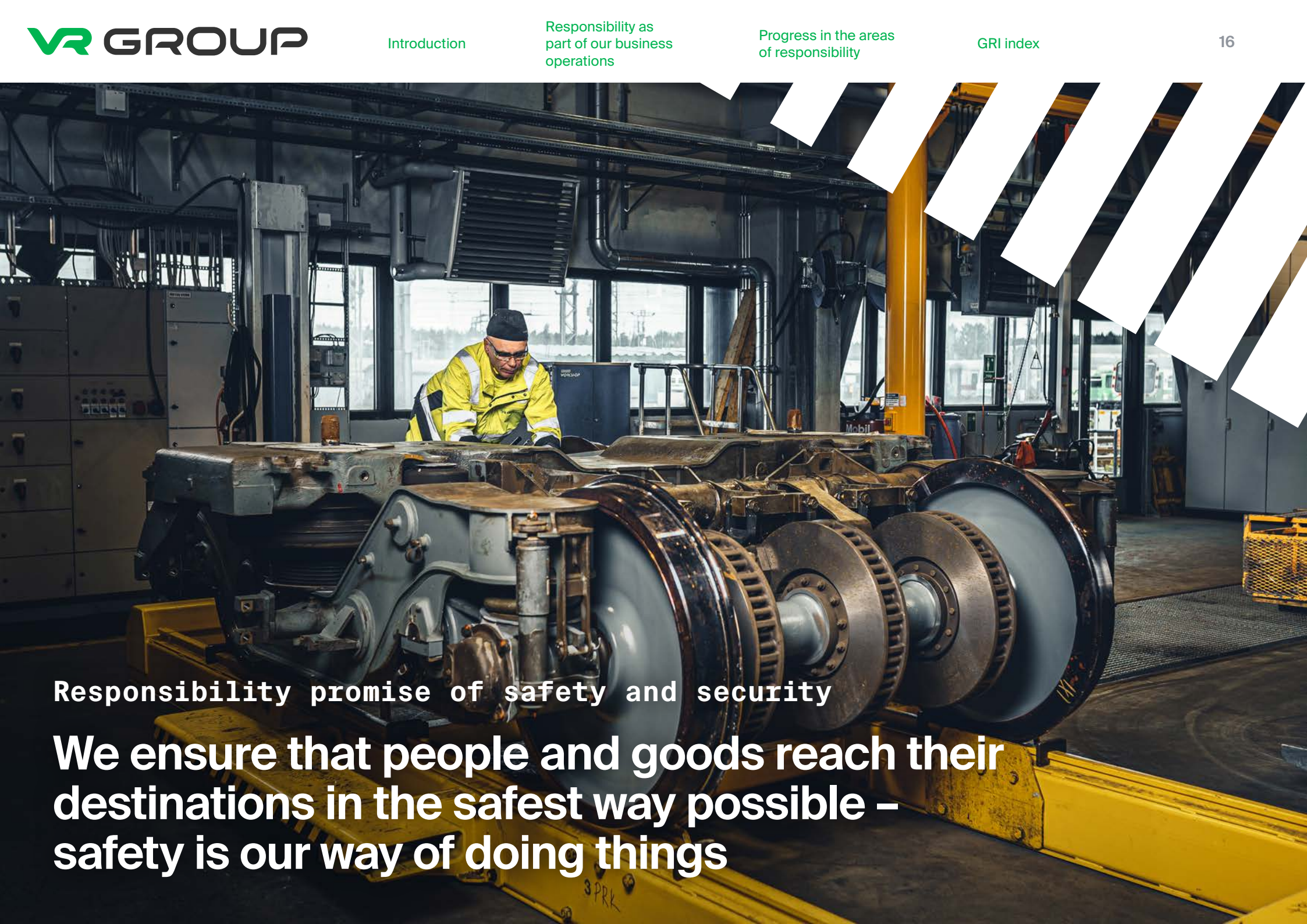
### Secondary goals that support the achievement of main goals

<div> <div>7 AFFORDABLE AND CLEAN ENERGY</div>  </div> <div> <p>Ensure access to affordable, reliable, sustainable and modern energy for all</p> </div>	<div> <div>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</div>  </div> <div> <p>Ensure sustainable consumption and production patterns</p> </div>	<div> <div>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</div>  </div> <div> <p>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</p> </div>
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Area of responsibility	Essential UN targets for VR Group	Examples of VR Group's means of advancing the targets
<b>Safety and security</b> 	<p><b>11.2</b> By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.</p> <p><b>8.8</b> Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.</p>	<p>Safety and security management</p> <p>Public transport provided by VR Group, taking special groups into consideration in its development</p> <p>Equality plan</p>
<b>Customer orientation</b> 	<p><b>9.1</b> Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and fair access for all.</p> <p><b>10.3</b> Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices, and promoting appropriate legislation, policies and action in this regard.</p> <p><b>11.2</b> By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.</p>	<p>Stakeholder collaboration, participation in the development of a sustainable traffic system.</p> <p>Promoting regional accessibility and equality by maintaining traffic service</p> <p>Public transport provided by VR Group, taking special groups into consideration in its development</p>
<b>Employee experience</b> 	<p><b>8.5</b> By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.</p> <p><b>8.8</b> Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.</p> <p><b>10.2</b> By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.</p> <p><b>10.4</b> Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.</p>	<p>Equality plan</p> <p>Development of leadership</p>



Area of responsibility	Essential UN targets for VR Group	Examples of VR Group's means of advancing the targets
<b>Environmental responsibility</b> 	<p><b>13.1</b> Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.</p> <p><b>7.3</b> By 2030, double the global rate of improvement in energy efficiency.</p> <p><b>12.2</b> By 2030, achieve the sustainable management and efficient use of natural resources.</p> <p><b>12.3</b> By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.</p> <p><b>12.4</b> By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimise their adverse impacts on human health and the environment.</p> <p><b>12.5</b> By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.</p>	<p>Own environmental goals to increase energy efficiency, reduce emissions, increase material efficiency and improve chemical safety</p> <p>Increasing the share of railway traffic as a mode of transport</p> <p>Engaging suppliers' commitment to continuous improvement with regard to environmental matters</p>
<b>Corporate social responsibility</b> 	<p><b>17.16</b> Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilise and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.</p> <p><b>8.4</b> Improve progressively, through 2030, global resource efficiency in consumption and production, and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead.</p> <p><b>9.1</b> Develop high-quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and fair access for all.</p> <p><b>9.4</b> By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.</p> <p><b>16.5</b> Substantially reduce corruption and bribery in all their forms.</p> <p><b>16.7</b> Ensure responsive, inclusive, participatory and representative decision-making at all levels.</p>	<p>Customer and stakeholder collaboration</p> <p>Code of Conduct</p>



Responsibility promise of safety and security

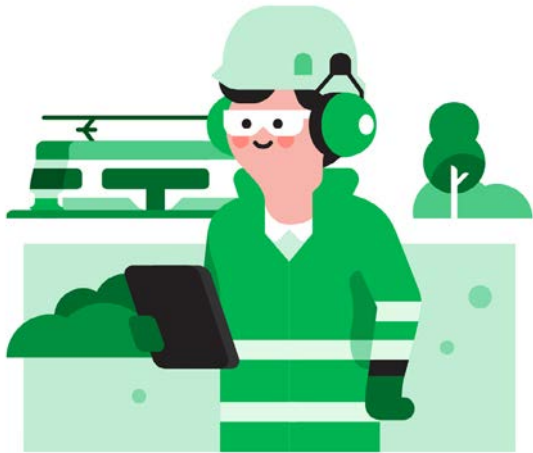
**We ensure that people and goods reach their destinations in the safest way possible – safety is our way of doing things**



# Progress in the areas of responsibility

## Safety and security

We ensure that people and goods reach their destinations in the safest way possible – safety is our way of doing things



## Safety and security management method and purpose

The purpose of VR Group's safety and security work is to prevent accidents, damage and harm to customers, personnel and the environment, and to ensure smooth and uninterrupted business operations. Our safety and security activities are based on the safety and security policy and strategy approved by the Board of Directors of VR Group, specifying the meaning of safety and security and related objectives. Annual safety action plans and targets are drawn up at the Group and unit levels based on the safety and security policy and strategy. In 2022, we integrated the human and organisational factors (HOF) perspective and the Safety first, One safety, Vision zero and Safety compliant principles into VR Group's safety and security strategy. VR Sweden will be integrated into VR Group's safety and security policy and strategy in 2023, and we will start to develop the company's safety and security in accordance with the "One safety" operating model.

At VR Group, safety and security responsibilities are clearly defined as part of the management system and they extend to key roles and different levels of the line organisation. We require our entire organisation to participate in and commit to safety and security.

The Board of Directors approves the safety and security and risk management policies and safety and security strategy, as well as strategic safety and security goals. The Board of Directors also sets safety and security reward criteria for the entire personnel annually. Business units are responsible for the safety and security and risk management of their operations at all levels. The centralised safety unit uses its expertise to support and help business units to succeed in safety and security work and ensures the development of safety and security through common processes. The internal audit function audits operational compliance with VR Group's guidelines and management systems. Through our common safety and security policies, the safety and security strategy, and safety and security management systems and methods, as well as VR Group's safety and security guidelines, we enable and ensure safe, secure, efficient and high-quality operations.

## Indicators of safety and security

### Railway safety

In 2022, there were no accidents resulting in the death of passengers or personnel in train traffic or shunting operations in Finland and Sweden.

Although the number of railway safety incidents in Finland decreased from the previous year, the joint frequency target set for 2022 ( $\leq 20.0$ ) was not achieved. The final outcome was 23.3. The railway safety incident frequency for VR's operations in Sweden is not comparable with the Finnish figures due to a difference in the calculation method. In Sweden, the railway safety incident frequency is measured as a ratio of kilometres driven, whereas in Finland, the frequency is measured as a ratio of hours worked. We will harmonise the measurement methods during 2023.

In Finland, the number of significant railway safety incidents (16) decreased slightly from the previous year (20). The number of significant level crossing accidents (dead or seriously injured, or more than 6 hours of traffic disruption) was halved to 5 (12). In 2022, there were a total of 13 (26) level crossing accidents in which VR Group was involved. The Finnish Transport Infrastructure Agency is implementing a 12-year (2021–2032) national traffic system plan to improve the safety of level crossings.

We always thoroughly investigate all significant incidents and use the results of the investigations to determine the necessary corrective actions. We conduct the investigations in accordance with the common process in use at VR Group, but the business units have various tools at their disposal for conducting investigations in accordance with the process. VR FleetCare revised its incident investigation practices in 2022 by adopting the A3 investigation model, which is a structured and standardised continuous development tool based on the lean operating model.



## VR Group's railway safety incident frequency by business unit

Business operation	Outcome in 2022	Goal for 2022	Outcome in 2021	Outcome in 2020
VR Passenger Services, Finland	7.8	8.0	6.1	9
VR Transpoint's rail logistics	37.2	27.0	38.7	28.7
Train operations	29.8	27.0	40.5	32.9
VR FleetCare	20.2	18.0	29.8	19.4
<b>VR Group, total (1)</b>	<b>23.3</b>	<b>20.0</b>	<b>28.9</b>	<b>22.5</b>

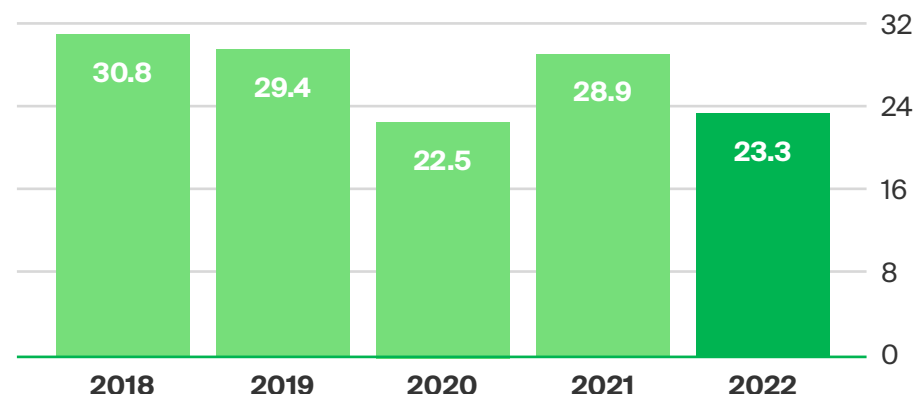
(1) The table shows figures for Finland only. The railway safety incident frequency for VR's operations in Sweden is not comparable with the Finnish figures due to a difference in the calculation method.

In 2022, a total of 168 deviations affecting the frequency of rail traffic non-compliances occurred in VR Group's operations in Finland. The railway safety situation has developed in the right direction over a long review period in spite of challenging snow and ice conditions making the situation more difficult in winter. In the first winter months of 2022, we reacted to the wintry conditions by acutely and actively addressing work in the conditions in question and by holding campaigns, training sessions, safety clinics and safety discussions between supervisors and subordinates to raise awareness.

The railway safety situation did not develop in accordance with the targets during the spring and summer, as the frequency of incidents remained at the same level. Incidents were particularly common in shunting work. VR Transpoint launched a pilot project aimed at reducing shunting speeds, according to which the speed for shunting work operated by rail logistics drivers was reduced in November to 20 km/h from the previous 35 km/h with a few exceptions. In addition, we started a shunting deviation analysis project at VR Group to identify the root causes of shunting deviations. A total of 140 deviations were analysed as part of the project. Based on the project, we made observations and action proposals with regard to the investigation of incidents, work processes, support for work, training and ensuring competence, as well as snow, ice, faults and deficiencies in the railway network.

VR Group operates passenger and freight traffic according to the safety certificate issued by the Finnish Transport and Communications Agency Traficom. The Finnish Transport and Communications Agency Traficom renewed VR Group's safety certificate for a new period of five years in spring 2022.

## Development of the railway safety incident frequency



## Occupational safety

In 2022, VR Group's accident frequency in Finland was 8.6 accidents per million hours worked. The frequency was higher than the target level ( $\leq 7.0$ ) by a clear margin, but the outcome did show an improvement compared to 2021 (9.2). The accident frequency in Sweden was 5.7 (for the period of July–December 2022). The accident frequency for Sweden was not included in the company's overall accident frequency for 2022 because VR Sweden only became part of VR Group at the beginning of July.

The number of work-related accidents affecting frequency decreased from the previous year. The number of work-related accidents that led to an absence exceeding one month stayed the same in 2022 and was 12 (12). The number of days of absence due to accidents also decreased to 1,369 (1,498). Our business units VR Transpoint and VR FleetCare reached their accident frequency targets.

We report work-related accidents for in-house employees in Finland and external workers working at VR Group workplaces. We monitor subcontractors' work-related accidents quantitatively (a total of 30 in 2022) but not included in VR Group's accident frequency. The accidents that involved VR Group personnel and subcontractors' personnel in 2022 were primarily related to moving around (slipping and falling).

## VR Group's lost-time injury frequency (LTIF1) by business operation

Business operation	Outcome in 2022	Goal for 2022	Outcome in 2021	Outcome in 2020
VR Passenger Services, Finland	14.0	10.0	12.1	12
VR Transpoint's rail logistics	2.3	4.0	7	0.6
Train operations	5.4	4.1	4.7	5.8
VR FleetCare	6.2	7.0	10.6	7.8
Corporate services	0.0	0.0	0	0
<b>VR Group, total (1)</b>	<b>8.6</b>	<b>7.0</b>	<b>9.2</b>	<b>7.6</b>

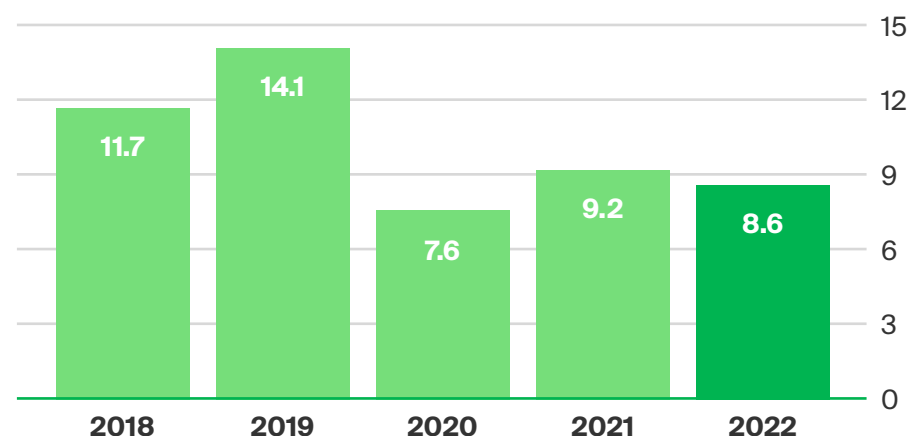
(1) The figures do not include VR Sweden because the data is not comparable. No target was set for VR Sweden in 2022.

The occupational safety situation in Finland was adversely affected by the challenging winter conditions in the first months of 2022 and, among VR Group's individual businesses, the safety performance of Pohjolan Liikenne, which accounted for nearly half of VR Group's total accidents affecting the LTIF1 indicator.

We addressed winter safety in an enhanced manner by, for example, increasing awareness of hazardous locations and situations and by defining corrective actions in collaboration with the personnel. The measures we took to improve the occupational safety performance of Pohjolan Liikenne included the introduction of protective equipment (mandatory studded shoes for the winter season) and changes to the operating model to strengthen safety management practices (regular operational quality and safety meetings and a higher frequency of work safety committee meetings). A safety programme based on VR Group's safety and security roadmap has been created for Pohjolan Liikenne for 2023 with the aim of halving workplace accidents and commuting accidents.

In addition to taking targeted measures, we continued to conduct regular safety briefings to monitor the safety situation and share the lessons learned and good practices. The practice of conducting the briefings remotely – which had proved to be effective during the COVID-19 pandemic – was continued, but we were also able to meet in person at the workplace. The number of participations in the briefings amounted to nearly 59,000 in 2022. We were also able to resume safety rounds by management, supervisors and specialists after a two-year hiatus as COVID-19 restrictions began to be lifted in a controlled manner starting in April 2022.

## Development of the lost-time injury frequency (LTIF1)



VR Group's well-being, health and occupational safety activities in Finland are managed using a management system specified to correspond with the ISO 45001 standard at the Group level (certified in VR Kunnossapito Oy). The management system specifies the minimum level of occupational well-being, health and safety (WHS) activities, in addition to which the business operations have their own guidelines supplementing the management system. WHS activities are based on identifying hazards and the stress factors of work, as well as the assessment and management of risks, which includes proactive measures under both normal circumstances and in exceptional situations. The development of WHS issues is communicated openly to the personnel.

## Information security and cybersecurity

In 2022, there were no significant information security incidents, and no significant findings were made through the Bug Bounty vulnerability award programme in use throughout the VR Group. As in previous years, no train journeys needed to be cancelled in 2022 due to information security incidents in Finland and Sweden.

In 2022, we started preparing for the implementation of the NIS2 Directive in our Finnish organisation. The NIS2 Directive sets out a minimum level for cybersecurity risk management measures and reporting obligations for all industries within the Directive's scope of application, which include energy, transport, health and digital infrastructure, for example. In Finland, compliance with the Directive will be supervised by the Finnish Transport and Communications Agency Traficom, which requires operators in the aforementioned sectors to operate in accordance with the ISO27001 standard.

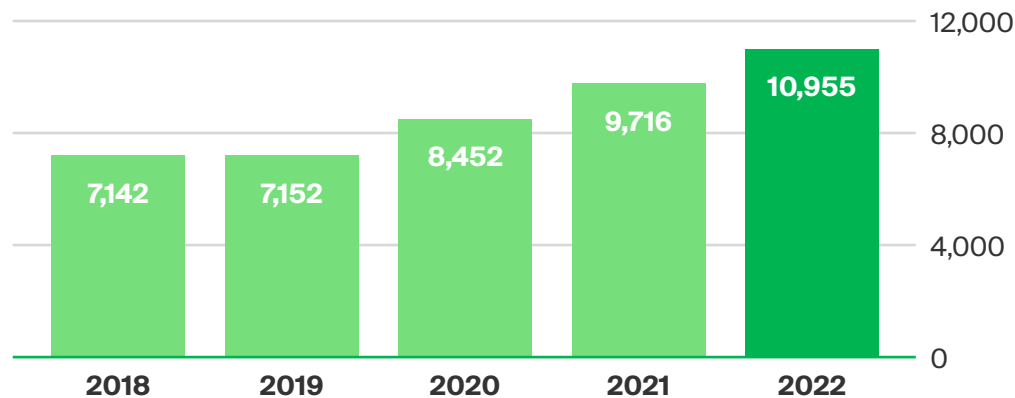
The measures taken in Finland in 2022 included a gap analysis, based on which our partner assessed the ISO 27001 compliance of our information security. We will implement the Directive in our operations in Finland and Sweden in 2023 and 2024.

In general, it can be said that the number of cyber attacks has increased and that they are more advanced as a result of digitalisation. Cybersecurity incidents can also cause financial losses and undermine users' trust in services. For this reason, we invest heavily in the development of cybersecurity capabilities, preparedness and risk management. In 2023, we will continue the implementation of tools and the harmonisation of cybersecurity-related operating models in Finland and Sweden, which began in autumn 2022.

## Development of safety and security work and knowledge-based management

The systematic management of safety and security and the utilisation of safety data are prerequisites for the continuous improvement of safety and security. Management and development must be based on information that is easily available through reporting to support analyses and conclusions. We collect information on safety and security in an information system, which forwards the notifications to supervisors and specialists for processing. The notifications are used to determine the measures to be taken, and we systematically monitor the implementation of the measures. The number of notifications has increased steadily from one year to the next, and the rate of notifications related to accidents, incidents or observations is good: more than half of the notifications were safety observations, which is a basic prerequisite for the development of safety and security. Approximately half of VR Group's employees in Finland made safety and security observations.

### The development of safety observations



At VR Group, we use risk assessments and workplace surveys, which are the employer's responsibility pursuant to the Occupational Safety and Health Act and the Occupational Health Care Act, in the development of safety and security. The supervisor is responsible for carrying out the risk assessment and uses experts for assistance. Occupational health care is responsible for workplace surveys, which are primarily conducted in connection with risk assessments. We assess risks in terms of both consequences and probability (5x5). Based on the risk assessment, we specify the necessary risk management measures to continue operations or prepare for the risk. Data and measures related to risk assessments are also managed through our safety and security information system.

When VR Group employees work in shared workplaces, we identify occupational safety risks and issues as part of the shared workplace's occupational safety cooperation and also take them into account in occupational safety risk assessments concerning the Group's personnel. We investigate occupational accidents at common workplaces in accordance with VR Group's standard investigative process, reviewing both human and organisational factors in addition to investigating the course of events.

VR Group has Safety Groups that engage all of VR Group's businesses and focus on areas such as cybersecurity, occupational safety and railway safety. The aim of the Safety Groups is to share best practices related to safety and security, agree on the management of common safety risks and related procedures, and maintain a shared situational picture of the development of occupational safety. Customer health and safety risks related to our business are managed and closely monitored as part of the Group's activities related to safety and security.

The engagement and commitment of employees is vital for maintaining and developing VR Group's good safety and security culture and for promoting the employees' personal well-being and working capacity. Employees are involved in the development of safety at various levels and contexts. Our personnel are engaged in development efforts through participation in risk assessments, safety briefings, observation rounds and the investigation of incidents and accidents, for example. In decisions concerning our personnel, we take into account the views of the personnel and their representatives, as well as safety and security perspectives.



Orientation on safety and security issues is included in the basic training for railway professions. As part of VR Academy, VR organises safety and security-related training that is available to everyone. Supervisors are responsible for orientation training. Supervisors are also responsible for the competence of the personnel during their work. In orientation training and mentoring, special attention is paid to reviewing various possible incidents and risks related to the work, and to learning safe, healthy and ergonomic working methods.

Safety briefings are held at the workplace in connection with other training, meetings and group development discussions. Area-specific and workplace-specific training is organised in the context of exceptional situations and particular risks and to disseminate up-to-date information. The occupational health care service providers provide advice and guidance in accordance with the Occupational Health Care Act and the workplace action plan, and at the request of supervisors. The first aid preparedness of the personnel is maintained on a workplace-specific basis and in accordance with risks and job roles. All of our personnel working at the customer interface have received first aid training. In other job roles, the number of employees who have received first aid training is based on the risks of the work and the related assessment of the adequate level of preparedness at the workplace. A centralised agreement has been signed with a service provider for first aid training.

We have signed a separate contract with employee organisations regarding statutory occupational safety activities. The agreement defines different roles and the organisation and activities of work safety committees, among other things. The work safety committee acts as a cooperative body between the employer, employees and salaried employees on extensive matters concerning occupational safety and health and well-being at work. Work safety committees cooperate with the public authorities and key stakeholders as necessary. Details of the occupational health and safety organisation's training are specified in agreements between the employer and personnel organisations. In addition to basic training, the occupational health and safety organisation participates in additional training related to the occupational safety aspects of the workplace, in accordance with the annual training plan. We updated the occupational health and safety collaboration agreement at VR Group in cooperation with personnel organisations at the end of 2022. The new four-year occupational health and safety period that started at the beginning of 2023 will last until the end of 2026. In Pohjolan Liikenne and road logistics, occupational safety and health has been agreed on locally, and the term of office is two years.

Safety goals are incorporated into the remuneration systems for management, supervisors and personnel. Most of our personnel are covered by a short-term incentive system, in which an annual safety and security target is set for everyone. VR Group's Board of Directors wanted to emphasise the importance of safety and security in remuneration and established it as a criterion that is independent of EBITDA. Starting from 2022, rewards have been paid for the achievement of the targets at the business-specific level.

In addition, quarterly safety and security rewards or similar incentives are used for employees in operational positions. The remuneration model has been seen as a good way of encouraging staff to work with a higher level of safety and security, and it allowed the staff to be rewarded, for example, for long periods without accidents at the unit level, even though the frequency targets set for 2022 were not reached. The quarterly rewards for safety and security will continue in 2023.

In safety and security management, the largest development project in 2023 concerns the integration of safety and security-related efforts, safety and security strategy, and safety and security performance indicators and targets between Finland and Sweden. We will also continue to develop the safety and security culture by, for example, training management and personnel and by encouraging personnel to promote safety and security by making more safety observations, for instance. We are also planning a safety and security atmosphere measurement that covers all of our personnel.



"We care" is one of VR Group's three values. Our safety pledge and our efforts for it are one of the ways in which this value is present in our work. This value means that we care for and respect each other and our customers. We ensure safety and take care of the environment.

## CASE

## Engaging all VR FleetCare's personnel in the development of safety and security culture

Safety and security always come first at VR FleetCare. This applies to both employee safety and security, as well as the safety and security of our customers. A safe and secure workplace requires a workplace atmosphere in which everyone takes responsibility for their actions and for others.

All VR FleetCare's employees were engaged in a comprehensive DareToCare training programme. Supervisors attended two-stage training aimed at improving their skills related to managing the development of safety and security in their respective teams. Between the training stages, the supervisors were assigned to hold training for their teams to develop safety and security-oriented thinking. All VR FleetCare employees participated in these training activities. The training focused on safety and security issues that are already at a good level, as well as areas in which further development is needed. The teams also learned and collectively adopted new tools for giving and receiving positive and constructive feedback.

The impact of the DareToCare training programme was measured by means of a survey that highlighted a positive change in attitudes towards safety and security issues and improved supervisor performance with regard to operating methods that promote safety and security. The personnel also indicated that actions that compromise safety and security are now addressed more actively than before.

The systematic development of the safety and security culture will continue in the coming years under a model that engages all employees, in accordance with the DareToCare training programme.

## The war in Ukraine and its impacts on VR Group's safety and security-related activities

Russia's invasion of Ukraine in February 2022 had several impacts on VR Group, which has been designated in Finland as an organisation that is critical to the security of supply. We have monitored the development of the situation in collaboration with the authorities and held regular meetings on preparedness and ensuring the safe continuation of traffic with the Finnish Transport and Communications Agency Traficom, the National Emergency Supply Agency and the Finnish Transport Infrastructure Agency. VR Group has had to be responsible for the storage of Russian wagons that are subject to EU sanctions and involve significant security risks, for example. Traficom applied for an exemption order for the transfer of the rolling stock, which was subsequently transported to Russia before the turn of the year 2023.

Ensuring cybersecurity was a very high priority in the changed circumstances. We increased our level of preparedness by protecting our systems and specifying systems for crisis situations, in accordance with their level of criticality. In addition to technical protection, users also play a key role with regard to cybersecurity in the changed safety and security situation, as they can prevent cyber threats by being diligent, careful and proactive. We reminded our personnel of the importance of secure communications on various channels with regard to suspicious messages, attachments, links and contacts, and also highlighted ways to ensure physical security by locking premises where equipment is located, for example.

We also took a wide range of preparedness-related management measures at VR Group to ensure business continuity and the safety and security of employees. For instance, we updated our personnel reservations to ensure the adequate availability of personnel for critical tasks even in exceptional circumstances, assessed the air-raid shelter situation, purchased iodine tablets and used our intranet to disseminate information to our personnel on preparedness at home. Near the end of the year, we prepared electricity preparedness plans for VR to specify our response to power cuts in different job roles, operating locations and situations.

We are keeping a close eye on events between Russia and Ukraine. We will maintain our preparedness measures for as long as the situation requires it, and we will update our measures as necessary.

A photograph of a smiling man with a beard, wearing a green jacket over a white t-shirt, sitting at a table and eating. He is holding a fork and knife. The background is slightly blurred, showing an indoor setting with large windows and other people. In the top left corner, there are several white diagonal bars of varying lengths.

**Responsibility promise  
of customer orientation**

**We are our customers' first choice**



## Customer orientation



**We are our customers' first choice**



### Customer orientation measurement and key indicators

Our customers include VR Passenger Services' private customers and public authorities engaged in the procurement of public transport services, VR Transpoint's industrial companies in various sectors, and VR FleetCare's rolling stock owners. Due to the diversity of the customer base, different customers have different needs. However, our promise of customer orientation is the same for everyone – being the customers' first choice. Customer-oriented operations are a basic prerequisite for sustainable business and growth, and thus enable the growth of VR Group's handprint. For example, the main objective of VR Group's corporate social responsibility is to increase the volume and share of environmentally friendly rail traffic and other public transport: this can only be achieved if customer orientation is at the core of our operations.

VR Group measures its performance with regard to customer orientation by means of customer surveys. The results of the surveys help us learn more about our customers and their needs, monitor the development of customer-oriented operations, and plan measures to improve the customer experience.

The indicator we use is the NPS (Net Promoter Score) index, which can range between -100% and +100%. The value of the indicator is calculated by subtracting the number of answers for an excellent grade (9 and 10) from the number of answers for a poor grade (0–6) and proportioning the difference to the total number of answers.

In HSL commuter traffic operated by VR Passenger Services, the percentage of passengers satisfied with HSL, with a range of 0–100 per cent, is measured instead of NPS.

In VR Sweden's contract traffic, customer orientation performance is measured in various ways, depending on the contract. In some of the contracts, customer satisfaction surveys are conducted by the authority that purchases the traffic services, and the scale varies accordingly.

We continuously analyse factors that influence customer satisfaction. In long-distance train services in 2022, the NPS scores we received from customers were significantly influenced by the punctuality, travel comfort and cleanliness of trains, information provided during the journey, the service provided by conductors, safety and security, and wi-fi services. The monitoring of customer satisfaction also covers the development proposals expressed in customer surveys and feedback.

### NPS and punctuality

Key indicator	2022	2021	2020
<b>Customer satisfaction (1)</b>			
Long-distance train traffic, NPS (2)	<b>42</b>	39	36 (46)
Commuter train traffic, NPS (2)	<b>23</b>	9	11 (31)
VR Transpoint, NPS	<b>12</b>	27	33
VR FleetCare, NPS	<b>11</b>	-4	17
HSL commuter train traffic, satisfaction level, % (3)	<b>85.0</b>	77.3	89.7
<b>Punctuality (4)</b>			
Long-distance train traffic (5 min), %	<b>82.6</b>	86.9	88.6
Commuter train traffic (3 min), %	<b>94.7</b>	92.6	96.6
Rail logistics (15 min), %	<b>89.4</b>	87.1	90.4
HSL commuter traffic (2 min 29 s), min (5)	<b>0.69</b>	1.06	0.51
Customer punctuality, long-distance train traffic (5 min), %	<b>81.2</b>	85.4	85.6

- (1) NPS for VR Transpoint and VR FleetCare is calculated as the average of four measurements. The exceptions were VR Transpoint having measurements taken only three times in 2022 and VR FleetCare having measurements taken only twice in 2020. In VR Passenger Services, a new calculation method has been applied since 2020, in which the outcome is the figure for the full year.
- (2) Measurements for 2020 calculated according to the old method are shown in brackets.
- (3) Range is 0–100 %.
- (4) The minutes indicated in brackets are the limits for delays. If a train exceeds the limit for a delay, it is considered delayed.
- (5) Average number of minutes of delay for all trains.



The NPS of VR's long-distance services has developed favourably, and the score in 2022 came to 42 (2021: 39). Investments in cleaning, the development of the services in on-board restaurants and improvements in digital self-service channels, in particular, have improved customer satisfaction in long-distance traffic.

The NPS of VR's commuter train services increased significantly in 2022, reaching 23 (2021: 9). HSL's customer satisfaction also increased. The percentage of satisfied customers in 2022 was 85% (2021: 77.3%). The general development wishes were mainly related to the punctuality of trains, the management of disturbances and incidents, and the cleanliness and health security of trains. In both long-distance and commuter services, customers particularly praised the personnel and the development of digital channels.

We sought to increase our insight into the customer experience in 2022 by adding more measurement points along various stages of the customer path. We have added more real-time post-journey customer experience measurements in both commuter and long-distance train services to complement the conventional NPS measurements.

VR Transpoint's client satisfaction was exceptionally only measured three times in 2022, and the client satisfaction indicator showed a decrease compared to the previous year. The average quarterly NPS decreased to 12 (2021: 27). Although changes in pricing due to high cost inflation were reflected in the client satisfaction score, our clients gave us positive feedback on reliability and cooperation.

The NPS of VR FleetCare's clients developed favourably, rising from -4 in 2021 to 11 in 2022. We received positive feedback on the improvement of client cooperation, the services we provide and the development of our rolling stock maintenance programmes. Our professionalism, experience and technical expertise are strengths that are valued by our clients.

The punctuality of our long-distance train services fell short of the target of 90% of trains arriving less than five minutes behind schedule. Our punctuality rate for long-distance train services was 82.6%. As much as 47% of the delays in long-distance traffic were caused by rail infrastructure. 27% of the delays were caused by VR and the remaining 26% by reasons that were not directly related to either VR or the tracks. The other reasons include delays caused by weather conditions, for example. The punctuality of long-distance services, meaning the percentage of customers reaching their destination less than five minutes late, was also slightly below the target at 81.2% (target: 87.5%).

In rail logistics, punctuality improved from the previous year's level and reached the target level at 89.4% (target: 87.5% of trains being less than 15 minutes late).

The punctuality of our commuter train services fell short of the target of 97% of trains arriving less than three minutes behind schedule. In commuter train services, rail infrastructure caused 38% of the delays. 15% of the delays were caused by VR and as much as 47% of all delays were caused by reasons that were not directly related to either VR or the tracks. The combined punctuality result of VR Passenger Services' own commuter trains and HSL trains was 94.7%. The stricter threshold of 0.65 minutes of lateness stipulated by the HSL contract was not achieved, as the average lateness indicator for HSL commuter traffic was 0.69 minutes for the year as a whole. In HSL commuter traffic, rail infrastructure caused 40% of the delays. 10% of the delays were caused by VR and as much as 50% of all delays were caused by reasons that were not directly related to either VR or the tracks. Punctuality is also a key performance indicator in VR Sweden's contract traffic. The target values vary by contract.

Punctuality challenges were particularly due to renovation and construction work on rail infrastructure maintained by the Finnish Transport Infrastructure Agency, resulting in speed and capacity restrictions being more extensive than planned, and in track equipment failures. These restrictions were visible on the Karelian Line in Lappeenranta, the Tampere-Seinäjoki rail section of the main line and in commuter traffic. In passenger traffic, delays caused by the condition of the rail infrastructure as a reflection effect have increased from the previous year. In long-distance traffic, the share of all delays caused by railway infrastructure increased from 44% in 2021 to 47% in 2022.



"We drive improvement" is one of VR Group's three values. Our responsibility promise of customer orientation and our efforts for it are one of the ways in which this value is present in our work. This value means that with curiosity and courage, we continuously improve our work. As trusted professionals of sustainable transport, we drive a positive future for everyone.

## VR Passenger Services' customer orientation

Customer orientation is the starting point of VR Passenger Services' strategy. It combines the comfort, reliability, speed and environmental friendliness of travel. Strong and cost-effective growth by acting in the best interest of the customers at all stages of the journey is at the core of the strategy of VR Passenger Services.

We focused heavily on listening to and understanding our customers in 2022, and we want to increasingly engage our customers in our development efforts going forward. VR Passenger Services has enhanced its organisation-wide cooperation concerning the customer experience by, for example, creating new cooperation forums and systematically integrating customer experience analyses into the process of developing new services and products. We want to assign even more weight to listening to the customer. With this in mind, we launched a pilot in late 2022 to develop a model of closer collaborative development by establishing the VR Matkalla developer community, which includes both customers and VR personnel.

Customer orientation is at the core of all our service development and digital development activities. Several new features were added to the VR Matkalla app in 2022, for example. In the latter half of the year, we piloted functions that enable customers to use the VR Matkalla app to order restaurant car products delivered to their seats. This feature will be gradually expanded to cover all long-distance routes. Passengers on night trains can now also order breakfast delivered to their cabin.

One example of customer-oriented development in our long-distance trains is the conversion of the renovated areas of Ekstra Class wagons into quiet spaces. Based on customer wishes, the areas have been designated as quiet areas for work. VR Passenger Services announced in 2021 that it would invest in upgrading the network connections on its long-distance trains. The hardware upgrades were delayed due to the global component shortage caused by the COVID-19 pandemic, but the installation of the new network technology on the trains began in November–December 2022.

In 2022, VR also signed a significant procurement agreement on new rolling stock for commuter traffic, with an excellent level of travel comfort and energy efficiency. The 20 new Flirt electric trains are 50% more energy-efficient than VR's existing commuter rolling stock. In addition to investing in energy efficiency, we focus on travel comfort and good working conditions in our new rolling stock. The trains will start operating from spring 2026.

VR Passenger Services monitors its brand image by means of a monthly Brand Tracking survey. The development of the brand image is particularly monitored through key attributes. The key attributes are easy to use, service orientation and renewing. Their average score was approximately 62 during the year (61 in 2021), while the goal is 58.

## VR Transpoint's customer orientation

VR Transpoint aims to offer overall logistics services that meet the client's needs and support the customer's business. In the operations of VR Transpoint, customer orientation requires understanding of the client's business, supply chain and sector, as well as the ability to adjust operations to them in collaboration, listening to the customer. Customer orientation also means responding to customers' expectations and good management of the agreed tasks: easy and smooth service, flexible, efficient and safe operations, punctuality and operational reliability, as well as responsibility and trustworthiness. The customer is satisfied when the goods are in the right condition in the right place, delivered responsibly, competitively and punctually.

VR Transpoint and its partners have built new solutions that combine rail and road transport with port operations and other additional logistics services, for instance. This enables us to customise the customer's entire logistics chain with the necessary additional services from the factory to the port, which makes the management of the entire chain easier and more efficient. For example, an efficient and environmentally friendly comprehensive solution has been designed for the transport of roundwood from the wood terminal to the bioproduct mill to be built in Kemi. The new concept increases the efficiency of logistics by combining smooth loading services with transport services. The operating environment in logistics changed very significantly as the import of several raw materials from Russia was discontinued. This led to major changes in domestic transport flows and customers' transport needs over a short period of time, particularly with regard to roundwood transport. VR Transpoint has quickly reorganised its roundwood transport concept in response to the clients' changed needs, enabling higher transport volumes.

We strive to establish strategic partnerships with our customers, with the parties committing themselves to developing the operations together. One form of such collaboration is the preparation of joint emission strategies. These make it possible to significantly reduce the emissions of customer transport chains by moving transportation to rails and promoting other low-emission solutions. For example, VR and Metsä Group have deepened their sustainability cooperation relating to logistics and agreed on a new shared target, to halve emissions from transport covered by their cooperation by 2030. As significant actors in society, VR and Metsä Group play important roles in promoting environmental performance and responsibility.

The companies have established a joint working group to come up with concrete solutions for achieving the emission reduction target. Measures will be taken in areas such as the electrification of the railway network, increasing the efficiency of train concepts, and using of diesel made from renewable raw materials.

Customer cooperation also includes the development of new rolling stock solutions. We make full use of the tractive effort of Vectron electric locomotives, which is as high as 2,500 tonnes, and we have tested new Dr19 locomotives in Finnish conditions. The new locomotives will start actual operations in 2023. The Dr19 locomotives will play a significant role in logistics transport. The modern diesel locomotive enables larger train sizes and increasingly climate-friendly transport. In road logistics, our first trucks powered by liquid natural gas and biogas have started commercial traffic.

VR Transpoint is developing its information systems and digital services in an increasingly client-friendly direction to meet the needs of clients even better. We use data to improve our processes by increasing train sizes, maximising the use of electrically driven traffic and optimising road transport operations. Our developing IT solutions enable us to provide our clients with even more extensive and detailed information on transport operations. VR Transpoint's digital L360 service is one example of such a solution that provides real-time transport data. Maintaining a shared situational picture of transport operations helps to develop transport chains further.

VR Transpoint invests in active client information and communication about disruptions. Improving customer satisfaction is a key goal. We evaluate customer satisfaction once a year by means of an extensive customer satisfaction survey. The positives highlighted in the most recent client satisfaction survey included VR Transpoint's operational safety and responsibility, as well as the employees' service attitude. Areas for improvement highlighted in the survey included the price-quality ratio and operations in disruption situations. In addition, VR Transpoint's image as a developing company should be strengthened.

## CASE

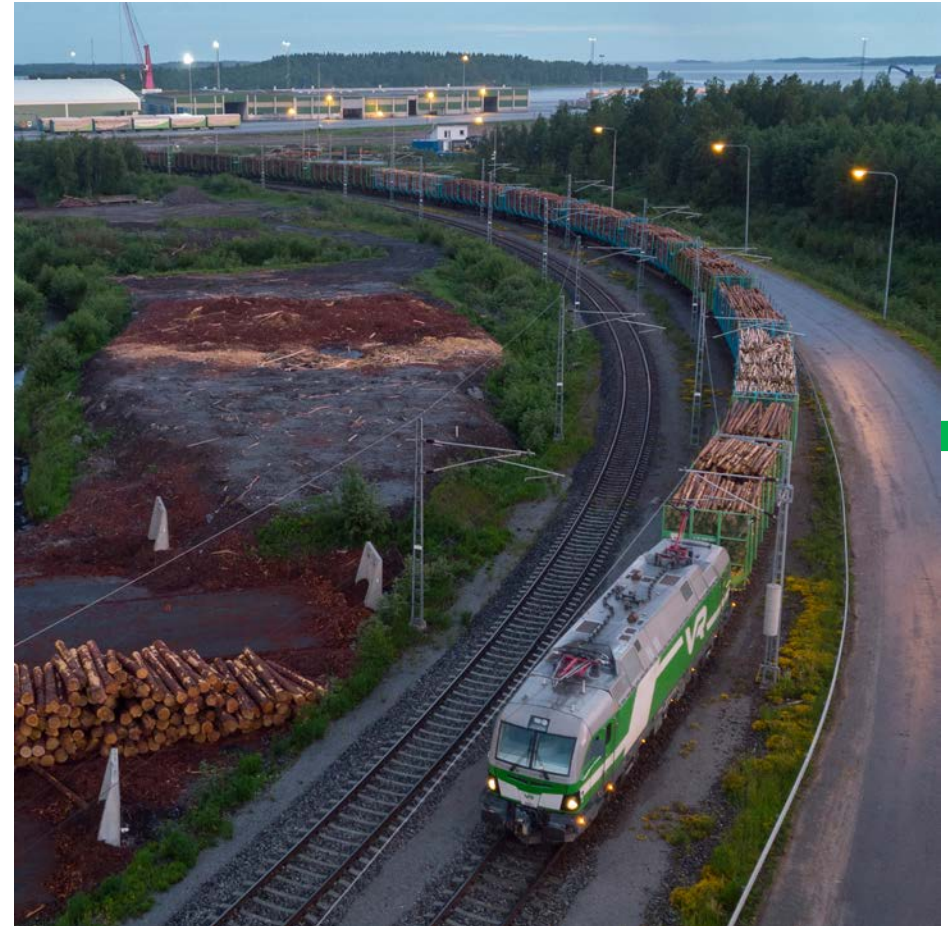
**VR Transpoint responded quickly to the growth of domestic roundwood volumes – pendulum solutions boost efficiency**

Wood for the forest industry has been increasingly procured within Finland's borders after wood imports from Russia ended last spring. To respond to the rapidly changed transport needs and growing demand, VR Transpoint worked together with its clients to reorganise its roundwood transport system and transport concepts, enabling higher transport volumes.

The entire system had to be re-evaluated, as it soon became apparent that the previous transport model would not be able to meet the demand. There were bottlenecks at various stages of the transport chain, involving loading stations, track capacity and train transport resources.

The new concepts are based on efficient pendulum transport, where the wagon body travels between one or more loading sites and one factory, and wagon rotation is optimised. In the new circumstances, it was possible to build more efficient pendulum transport models because there were many changes and the flows of roundwood were larger. The biggest and most visible difference compared to the former transport system is that fast loading was increased and high-volume locations, in particular, are visited more frequently than before. Pendulum transport also made it possible to ensure the sufficiency of rail infrastructure capacity and transport resources.

The project's timetable was ambitious, as the demand for roundwood transport grew very quickly due to the changed circumstances. The credit for the success of the project belongs to the highly committed personnel and strong cooperation with customers. The new transport concepts were introduced in stages. The new operating models require mutual commitment, and the collaborative development effort together with customers will continue on the basis of customer needs.





## VR FleetCare's customer orientation

VR FleetCare creates added value for clients by combining industry-leading expertise in rolling stock, digitalisation, an expert network, depots, service workshops and continuous development. High-quality maintenance of rolling stock plays a key role in ensuring a first-class customer experience for VR's end customers – both consumers and industrial customers. Our task is to ensure that rolling stock is in a safe and operational condition, precisely according to the customer's needs. In addition to the technical aspects of rolling stock, our maintenance activities focus particularly on aspects that influence travel comfort.

At VR FleetCare, we have made progress throughout the organisation in promoting a client-oriented culture through customer experience mentor activities. The customer experience mentor team is a change-oriented working group consisting of our employees working in production, quality and customer service positions. In 2022, the customer experience mentors organised a series of training webinars for FleetCare supervisors. The topics included the interpretation of client satisfaction survey results and ways to put feedback into action at all levels of the organisation. This will make it possible for measures and common practices that improve the client experience to be adopted more effectively at different levels of customer relationships.

The deployment of VR FleetCare's modern operating models and new ERP system began in autumn 2022. Changing customer requirements have been one of the guiding factors in the planning and design of the operating models and the ERP system. The roll-out of the new models and system will make our operations even more data-driven. This will further increase the efficiency of our production operations, and it will also be visible to our customers in the form of improved quality and reporting. We will deploy the modern operating models in full in 2023.

At VR FleetCare, working together with our partners, we have purposefully developed solutions suitable for the condition monitoring of rolling stock and track equipment for many years now. An agreement signed with the Finnish Transport Infrastructure Agency in 2022 further expands the condition monitoring of railway switches in the Finnish railway network. Failures of switch turning machines cause thousands of disruptions to train traffic and lateness for passengers in Finland every year. Switch condition monitoring and prevention of failures benefit several parties. It makes the work of the railway network owner and maintenance operator easier and reduces costs when faults can be predicted in advance. In addition, a customer travelling on a train run by the railway network operators is satisfied when it is possible to prevent the train from being delayed.

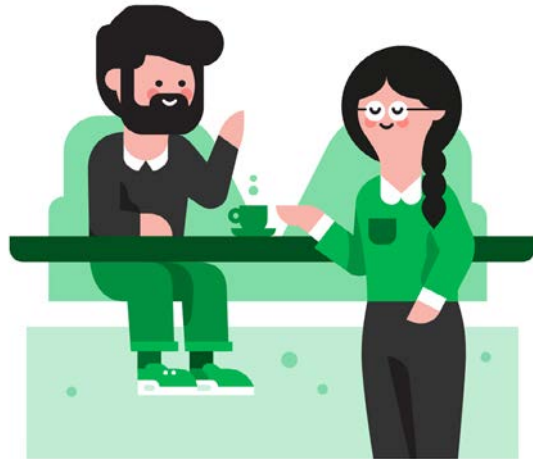


Responsibility promise  
of employee experience

**Together we build  
an inspiring workplace  
where everyone thrives**



## Employee experience



**Together we build an inspiring workplace where everyone thrives**



VR Group is a 160-year-old company that has always operated with a robust foundation of values for the benefit of our passengers, our customers and Finland as a whole. In 2022, we welcomed more than 3,000 new Swedish colleagues, which gave us an excellent reason to collectively explore and discuss the common values that guide our work while simultaneously getting to know each other. We launched a company-wide programme in the autumn to crystallise our shared values to establish the foundation for our future culture. Putting the values into words helps us understand the way we operate, share our common goals and work more effectively towards those goals. Our shared values guide our conduct in our workplace community, and they also communicate an important message to our customers and other stakeholders: this is who we are.

Our values are: We care, We work together, and We drive improvement. Caring creates a solid foundation, working together provides strength, and driving improvement orients us towards the future. Having crystallised our values, we will continue our culture journey. Our goal is for every team and employee to have the opportunity to discuss how the values are demonstrated in our day-to-day work and encounters. We will put our shared values into action in the way we communicate and interact, both within our workplace community and with our customers. The values also play a central role in leadership development, and they are reflected in our common management tools, such as performance reviews and target setting.

In 2022, employee experience continued to be influenced by external change factors and their impacts on business in the form of changes to personnel needs and operating models, among other things. In the aftermath of the COVID-19 pandemic, our customers have returned to public transport, which has contributed to the shortage of personnel in various production and customer service jobs in both Finland and Sweden. We are continuously planning new ways to meet this demand.

The war in Ukraine has also had a major impact on our organisation, due to the discontinuation of our cross-border services to and from Russia. From the personnel perspective, we have approached this challenge through active cooperation on the basis of change negotiations aimed at finding new positions within our organisation for as many as possible of the employees previously employed in jobs related to Eastern traffic.

We monitor the impact of our development actions for employee experience by means of a personnel survey conducted twice a year. We revised the content of the personnel survey in Finland in 2022 and asked our employees to share their opinions more broadly on various themes that influence job satisfaction. According to the survey, the themes that affect job satisfaction the most are working conditions, the content of work, and the company's reputation. In Sweden, we measured job satisfaction in 2022 by asking the personnel about employee experience, leadership work and their willingness to recommend their employer to others. In the future, we will conduct a company-wide personnel survey. All of our units are committed to implementing the necessary development actions. Our goal is to create an even better employee experience and, consequently, a better customer experience.



**We care**

We care for and respect each other and our customers. We ensure safety and take care of the environment.



**We work together**

We work together, listen to and learn from each other. We engage co-workers, customers, partners and stakeholders in collaboration.



**We drive improvement**

With curiosity and courage, we continuously improve our work. As trusted professionals of sustainable transport, we drive a positive future for everyone.

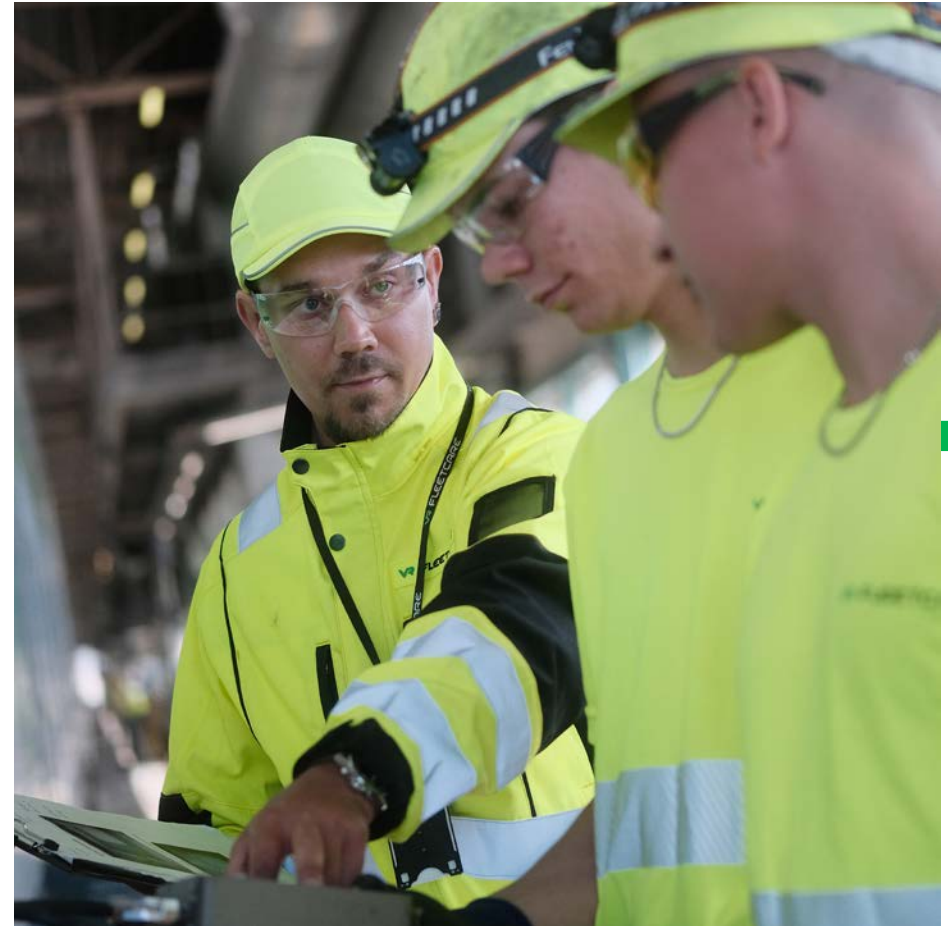
## CASE

**VR Group on a journey to discover values**

We used various tools to engage all of our personnel in identifying our shared values. Our journey of discovering our values began in the autumn with observations and interviews at a number of locations in Finland and Sweden. We trained members of personnel from various parts of our organisation as “value drivers” to facilitate workshops. Our just over 20 value drivers held a total of 50 workshops in November, with over 500 employees participating. We simultaneously had a survey open to our personnel to ask them which issues they consider to be the most important in their work. We received over 3,500 responses through the survey tool.

After the interviews, observations, workshops and survey, we compiled all of the comments and observations. At the beginning of December, we moved on to the stage of crystallising our values. By Christmas, we had clustered the extensive amount of material we had built together with our personnel into three core values for our organisation: We care, We work together and We drive improvement

These values emerged clearly as the themes that have the most meaning for our personnel as factors that guide our operations. In addition to defining our values and putting them into words, our journey of discovering our values has been important with regard to increasing team spirit and cohesion. We will actively continue this journey of discovering our values and building our culture as part of the development of our operations and workplace community.





## Commitments and principles

At VR Group, we are committed to respecting human rights, such as equality and non-discrimination, and providing everyone with equal rights and opportunities regardless of gender, nationality, religion or other similar characteristics. We adhere to the principles of the International Labour Organization (ILO).

We are also committed to the UN Sustainable Development Goals to reduce inequality and offer decent work. VR Group signed the FIBS Diversity Charter in 2015. By signing the Diversity Charter, we committed to the following principles:

1. We offer equal opportunities
2. We identify and make use of individual expertise and needs
3. We justly manage the personnel and customer accounts
4. We communicate about our objectives and achievements

At VR Group, we have zero tolerance for inappropriate treatment, harassment and occupational discrimination. We comply with laws, agreements and other obligations with regard to employment relationships. We respect the right of employees to form and join trade unions is respected. In the processing of personal data and data protection matters, we observe the principles of the EU's General Data Protection Regulation and national legislation.

## Diversity

We conducted a diversity and inclusion survey in spring 2022. The survey was focused on the employees' views and experiences of the current state of diversity and inclusion at VR Group. The results of the survey indicated that employees are satisfied with the openness of their workplace community and the inclusive atmosphere, where everyone is free to be who they are. Sources of dissatisfaction included the fair allocation of duties and shifts and the extent to which diversity has been taken into account at our physical premises.

We will take the results and recommendations of the diversity and inclusion survey into account in preparing measures under the equality and non-discrimination plan. Increasing awareness and understanding is one of our main goals, as that will enable us to better identify existing challenges, take advantage of active engagement in the development of our operations, discuss the issue constructively, and have each employee recognise their role as a member of a diverse and inclusive organisation. To increase understanding, we engage in active communication on this topic, encourage good dialogue, review our internal operating practices and organise training on the significance of diversity and inclusion for the organisation.

## Working capacity and well-being

We steer VR Group's well-being activities in Finland by means of an ability to work programme. The aim of the ability to work programme is to maintain the personnel's working capacity by ensuring systematic monitoring and support. The ability to work programme is based on an early support model. It includes descriptions of signs and limits related to compromised working capacity and working capacity problems that are reacted to. The programme also describes various rehabilitation measures that can be used to provide support in continuing to work or returning to work.

In Sweden, we have invested in developing the work environment and provided our employees with tools for looking after their health. We have invested in the ergonomics of passenger personnel and preventative ergonomics for mechanics. We have strengthened the competence of supervisors by focusing even more on addressing psychosocial factors in the work environment.

Development measures are key ways of supporting the working capacity of employees and the well-being of workplace communities. These development measures may be allocated to work and working conditions, the workplace community, competencies and the individual resources of employees. Promoting well-being and working capacity is part of the normal activities of our workplace community and our various stakeholders, particularly with regard to leadership work in its various forms.

Supervisors monitor their team members' performance and sickness-related absences, and they address potential challenges related to working capacity at an early stage. Digital tools support supervisors in the management of working capacity and the monitoring of sickness-related absences. In addition, specialists from the HR organisation help supervisors to address issues related to working capacity and to find solutions. Occupational health care plays a key role in the identification of risks related to working capacity, the assessment of employees' working capacity and in supporting working capacity. The ability to work programme emphasises the importance of cooperation between supervisors and the occupational health care provider. We conduct regular meetings to ensure that the occupational health care provider is aware of the workplace conditions and changes therein, which also supports the working capacity of employees.

We offer comprehensive occupational health care services to all of our employees. The content of the service is determined on a country-specific basis, and there are also company-specific differences within Finland.

In Finland, occupational health care includes both preventative services and medical care. Occupational health care services are provided in accordance with good occupational health care practices and the occupational health care action plan, in partnership with an external service provider. Traffic safety requirements and the related health status requirements are an integral aspect of VR Group's occupational health care activities. We prepare occupational health care action plans on a company-specific basis and use business-specific appendices to add detail to them. The appendices are discussed on a collaborative basis by the work safety committees of our business units and group companies.

We conduct proactive well-being needs assessments at the business-specific level and draft well-being plans annually in connection with business planning. HR Business Partner is responsible for the planning of the business units' well-being activities, while Group-level planning is coordinated by the manager in charge of working capacity and well-being.

## Employee experience KPIs and personnel figures

We use Pulse surveys to measure employee satisfaction, commitment and related factors. The surveys are conducted twice a year, of which one is a comprehensive survey and the other is a smaller follow-up survey. Our employees can also submit open feedback when responding to the surveys. Based on the results, we draft company-level and unit-specific development plans, and we regularly monitor the implementation and effectiveness of the development measures.

Our systematic development of leadership work has produced good results. In Finland, our employees are moderately satisfied with our leadership work, and our development efforts in this area will continue in the years to come. The leadership index in the employee satisfaction survey conducted in spring 2022 was 3.4 (on a scale of 1–4). The recommendation index for personnel was 2.8, which corresponds to an eNPS of -8. We continued to invest in employee satisfaction and well-being in 2022. Our goal is to use team-specific and organisation-specific measures to improve employee satisfaction and build a positive culture. Requiring good behaviour in all encounters, including interaction through digital channels, is a key factor in reaching this goal.

The COVID-19 pandemic was reflected in increased sickness-related absences at VR Group in early 2022, particularly with regard to brief absences. Although sickness-related absences increased in Finland and amounted to 4.8% for VR Group, the total level of sickness-related absences has remained at a fairly moderate level. In our Swedish operations, the high rate of sickness-related absences, 8.9%, gradually decreased during 2022.

	2022	2021	2020
<b>Full Time Equivalents, average</b>			
Finland	5,704	5,581	5,698
Sweden	1,132	–	–
Other countries	10	39	120
<b>Total</b>	<b>6,846</b>	5,620	5,818
Change (%)	21.8	-3.5	-3.9
<b>Total salaries and wages, EUR million</b>			
Finland + other countries (1 Jan–31 Dec 2022)	323.1	297.2	292.3
Sweden (1 Jul–31 Dec 2022)	57.4	–	–
<b>Share of permanent employees (on average), %</b>			
Finland	97	97	98.7
Sweden	70	–	–
<b>Sickness-related absences, % of regular working hours</b>			
Finland (1)	4.8	4.6	4.4
Sweden (1)	8.9	–	–
Recommendation index / Finland (2)	2.8	2.4	2.7
Leadership index / Finland (2)	3.4	3.1	3.2
Employee Net Promoter Score (eNPS) / Sweden (2)	4	–	–
Leadership index / Sweden (2)	4.0	–	–

(1) The calculation method for sickness-related absences in Finland and Sweden is different, and the figures are not comparable.

(2) The scale for the recommendation and leadership index in Finland is 1–4. In Sweden, the eNPS is expressed on a scale between -100 and +100, and the leadership index on a scale of 1–5.



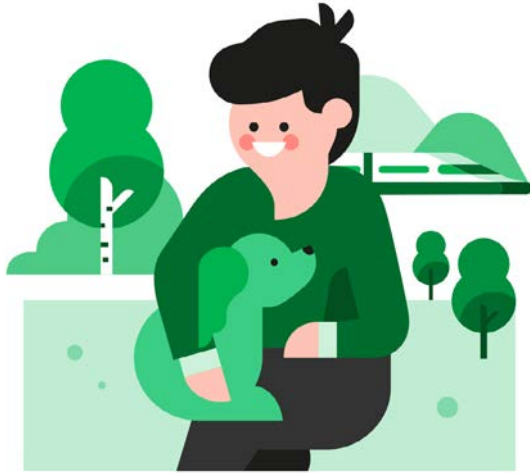
Responsibility promise of  
environmental responsibility

**We reduce the environmental  
impact of transport and the  
carbon footprint of society**





## Environmental responsibility



**We reduce the environmental impact of transport and the carbon footprint of society**



VR Group plays an important role when it comes to mitigating climate change. Rail transport is already the most energy-efficient and lowest-emission mode of transport, and we aim to hold a forerunner position in our other business operations, as well. Through its operations, VR Group reduces the environmental impacts of transport and the carbon footprint of society, contributing to the achievement of Finland's climate goals (carbon-neutral Finland 2035 and cutting traffic emissions by 50% by 2030). By making rail transport more popular, VR Group can also increase its handprint, that is, reduce the emissions of our customers and society as a whole. VR Group contributes to global climate efforts, to which it has committed itself through the UN Sustainable Development Goals. VR Group has engaged in systematic environmental efforts for some 30 years.



"We care" is one of VR Group's three values. Our environmental pledge and our efforts for it are one of the ways in which this value is present in our work.

VR Group has an environmental management system compliant with the requirements and implementation guidelines of the ISO 14001 standard. At VR Group, everyone is responsible for taking environmental concerns into account in their own work, and we train our personnel to act in an environmentally responsible manner. Our management is committed to ensuring responsible operations and taking environmental aspects into account in decision-making.




We have set environmental goals for 2021–2025 concerning the reduction of emissions, increasing energy efficiency and material efficiency, and improving chemical safety in Finland. Emissions and energy consumption per unit of output are to be reduced by 15 per cent by 2025 compared to the level in 2019. Material efficiency will be improved by increasing the Group's recycling rate to 80 per cent and by engaging our suppliers' commitment to continuous improvement with regard to environmental issues. In respect of chemical safety, the aim is to avoid major chemical leakages in the transport of dangerous goods and in handling chemicals. Of the environmental goals, the reduction of greenhouse gas emissions and the improvement of material efficiency are included in the remuneration systems of management and key personnel.

We take environmental responsibility into account in our financing. VR Group acquires green financing, which we use to invest in clean transport and renewable energy projects. Our Green Bond report is on [pages 45–46](#).

VR Sweden's integration with respect to environmental issues was still under way at the time of publishing this report. VR Sweden's data is included in the environmental figures only where specifically mentioned.



## Environmental goals for 2021–2025

SDG	Targets specified by the UN	Heading	Goal for 2025	Baseline 2019	Situation in 2022
	<b>13.1</b> Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries. (1)	Reducing emissions	Greenhouse gas emissions per unit of output decrease by 15%	0 % (baseline year)	-5 % ▼
	<b>7.3</b> By 2030, double the global rate of improvement in energy efficiency. (1)	Increasing energy efficiency	Energy consumption per unit of output decreases by 15%	0 % (baseline year)	-13 % ▼
	<b>12.2</b> By 2030, achieve the sustainable management and efficient use of natural resources.	Increasing material efficiency	The recycling rate is 80%	60 %	41 % ▼
	<b>12.3</b> By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.		Major suppliers commit themselves to continuous improvement (a share of new contracts, %)	Not required previously	66 % ▲
	<b>12.4</b> By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimise their adverse impacts on human health and the environment.	Chemical safety	No significant leakages (qty)	0 kpl	0 kpl ●
	<b>12.5</b> By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.				

(1) The development of emission and energy efficiency in the environmental goals is determined by calculating the weighted total for the development the businesses' emissions/energy consumption per unit of output. The percentage illustrates the change compared to 2019. More detailed information on the efficiency figures for each mode of transport is provided in the tables Greenhouse gas intensity (page 39) and Energy intensity (page 41).

## Reducing emissions

Scope 1 emissions are greenhouse gas emissions caused directly by our own operations. In practice, these emissions are caused by the fuels of diesel-powered train traffic and diesel bus traffic. Scope 2 emissions are greenhouse gas emissions caused by the production of purchased electricity, district heat and cooling. Scope 3 emissions, or other indirect emissions, are caused by the lifecycle emissions of goods and services we obtain, for instance. In addition, indirect emissions are caused by the commuting and business travel of our employees, final disposal of waste, investments, and emissions from the production of purchased energy.

In addition to greenhouse gases, traffic also causes fine particulate (PM) and nitrogen oxide (NO<sub>x</sub>) emissions. These emissions are calculated on the basis of fuel consumption for both rail and road transport.

VR Group's total greenhouse gas emissions for 2022 were 277,047 tCO<sub>2</sub>e. Of the emissions, used fuels caused 69,018 tCO<sub>2</sub>e and purchased products and services 91,400 tCO<sub>2</sub>e. In 2021, VR Group's emissions totalled 268,817 tCO<sub>2</sub>e. The share of used fuels was 76,364 tCO<sub>2</sub>e and the share of purchased products and services was 74,800 tCO<sub>2</sub>e.

In accordance with the environmental goals, VR Group's emissions per unit of output will be reduced by 15 per cent by 2025, using 2019 as the baseline. The figure includes the output-specific greenhouse gas emissions of all business operations in Finland (Scope 1 and 2 and subcontracted transport). The share of renewable fuel used by Pohjolan Liikenne is not included in calculating progress towards the goals, as its share is heavily dependent on tendered contracts and their specifications.

VR Group's emissions per unit of output decreased by 5 per cent. The factors contributing to this were, in particular, the growth in passenger train services and the measures taken to improve energy efficiency. The emissions generated by passenger train services amounted to 1.5 (2.2) gCO<sub>2</sub>e/pkm, while the emissions generated by rail logistics came to 5.7 (5.4) gCO<sub>2</sub>e/tkm.

Energy choices and increasing energy efficiency are the most significant ways of reducing emissions. The electricity used by VR Group's operations in Finland was entirely generated using renewable energy in 2022. Its origin has been verified with certificates of origin.

Renewable light fuel oil is used in VR Transpoint's shunting operations at two different production plants of a rail logistics customer. Replacing conventional fuel with a renewable fuel reduces greenhouse gas emissions from trains by 90%, and the renewable fuel burns cleaner than fossil fuels. Renewable fuel still represents a very small share of the light fuel oil used in rail logistics, but we aim to expand its use in cooperation with our customers in the future. VR Group also cooperates extensively with companies in other ways to reduce environmental impacts and the carbon footprint, particularly in logistics.

VR Passenger Services has been offsetting the fuel emissions of railcars and Kolari night trains since late 2019. Due to the non-electrification of the railway network, it is not possible to run these routes on electricity. In addition, VR Passenger Services offsets the greenhouse gas emissions of the production of electricity and diesel used in passenger train services and the operations of the shunting yards of passenger rail services. We offset the emissions by investing in Gold Standard certified voluntary emissions trading projects that reduce emissions and increase carbon sinks. These projects are solar and wind power plants in India (GS ID: 5928 and 5698) and a reforestation project in Colombia (GS ID: 4221).

Pohjolan Liikenne deployed 66 new fully electric buses during the year. The total number at the end of 2022 was 162 buses, which is one-third of the bus fleet of Pohjolan Liikenne. The company receives a lot of good feedback about the e-buses. Travelling is quieter and more comfortable, and the buses do not generate exhaust gases in traffic. The share of biodiesel in the fuel used by diesel buses has grown continuously. At the end of 2022, all diesel used by the buses was biodiesel.

VR Sweden has exclusively used fossil-free energy – electricity, biodiesel and biogas – in its traffic operations for several years now.

We also reduce the greenhouse gas emissions of our properties. The solar power plant at the Helsinki depot has now been in use for two full years. It generated approximately 757 MWh of electricity in 2022, and we plan to increase the production of solar energy. Competitive bidding for a solar power plant at the Oulu depot has begun, and preliminary studies are being carried out in two other locations. Our remaining oil and natural gas heating systems will be replaced by other solutions, such as district heating or geothermal heat. Natural gas heating at the Imatra cargo station was replaced by connecting the property to the district heating network, which is fully powered by renewable energy.

## Greenhouse gas emissions, tCO<sub>2</sub>e

	2022	2021	2020	2019
<b>Fossil emissions</b>				
Direct emissions (Scope 1)	<b>69,018</b>	76,364	77,172	90,206
Change	<b>-7,345</b>	-808	-13,034	-14,006
Indirect emissions from energy production, market-based (Scope 2)	<b>9,217</b>	9,770	8,003	10,053
Change	<b>-553</b>	1,767	-2,050	-3,458
Indirect emissions from energy production, location-based (Scope 2)	<b>45,306</b>	96,209	96,373	108,231
Change	<b>-50,903</b>	-164	-11,858	-16,659
Other indirect emissions (Scope 3)	<b>198,811</b>	182,683	168,548	183,032
Change	<b>16,128</b>	14,135	-14,484	18,323
<b>Total (market-based)</b>	<b>277,047</b>	268,817	253,723	283,291
Change	<b>8,230</b>	15,094	-29,568	859
<b>Purchased certified emission reductions</b>	<b>18,893</b>	8,288	11,803	2,392
<b>Biogenic emissions (1)</b>				
Biogenic direct emissions (Scope 1)	<b>18,104</b>	15,318	14,200	7,883

(1) No data available for Scope 3 (subcontractors' biofuels)

## Other indirect greenhouse gas emissions (Scope 3) by emission source, tCO<sub>2</sub>e

	2022	2021	2020	2019
Purchased goods and services	<b>91,400</b>	74,800	73,900	88,800
Capital goods	<b>12,651</b>	15,339	9,076	8,656
Other emissions from energy production (production of fuels and transmission losses)	<b>44,850</b>	32,204	29,417	33,326
Subcontracted transport with regard to incoming and internal transport	<b>1,004</b>	1,094	1,440	1,609
Subcontracted transport with regard to services sold	<b>38,511</b>	49,753	48,148	42,295
Waste	<b>1,325</b>	943	1,403	1,840
Business travel	<b>710</b>	622	597	1,228
Employee commuting	<b>8,114</b>	7,926	4,567	5,278
Properties leased to VR (1)	<b>245</b>	-	-	-
<b>Total</b>	<b>198,811</b>	182,683	168,548	183,032

(1) Properties leased to VR include emissions from the energy consumption of VR Group's headquarters. This figure has been reported on since 2022.

## Greenhouse gas intensity

Emissions per unit of output	2022	2021	2020	2019
Passenger train services in Finland, gCO <sub>2</sub> e/pkm	<b>1.5</b>	2.2	2.3	1.3
Bus traffic, gCO <sub>2</sub> e/km	<b>146.2</b>	275.4	310	489.9
Rail logistics, gCO <sub>2</sub> e/tkm	<b>5.7</b>	5.4	5.4	5.9
Road logistics, gCO <sub>2</sub> e/tkm	<b>43.4</b>	45.6	46.5	-

The indicators have been limited to direct emissions from the traffic use of electricity and fuel and direct emissions from fuel consumption by subcontracted transport. With regard to passenger traffic, the indicator has been calculated without the purchased emission reductions. The key figure for road logistics does not include the TransitarOy transports.

## Traffic emissions by mode of transport, tonnes

Train traffic in Finland	2022	2021	2020	2019
CO <sub>2</sub> e	<b>54,328</b>	61,381	60,028	66,291
NO <sub>x</sub>	<b>1,295</b>	1,447	1,389	1,474
Fine particulate	<b>26</b>	29	28	30

### Road transport in Finland

CO <sub>2</sub> e	<b>50,734</b>	52,851	50,447	48,839
NO <sub>x</sub>	<b>86</b>	106	133	233
Fine particulate	<b>1.8</b>	2.2	2	2.3

The CO<sub>2</sub>e emissions of rail traffic are limited to Scopes 1 and 2. The CO<sub>2</sub>e emissions of road transport are limited to Scopes 1 and 2 and the direct emissions of subcontracting transports.

## Increasing energy efficiency

VR Group has been working long-term to improve energy efficiency. The means for this have included increasing electric traction traffic, upgrading tractive stock to be more energy-efficient, increasing train sizes, enhancing traffic planning and training drivers in economical driving habits. In 2022, VR Group started a comprehensive energy efficiency programme that aims to increase the efficiency of energy consumption and engage all of VR's employees and stakeholders in the energy saving effort (see case).

In accordance with the environmental goals, VR Group's energy consumption per unit of output will be reduced by 15 per cent by 2025, using 2019 as the baseline. This indicator is based on the energy consumption per unit of output of VR's operations in Finland. Subcontracted road logistics transport is also included in the goal.

VR Group's energy efficiency per unit of output improved by 13 per cent. In passenger services, energy consumption decreased by as much as 36 per cent to 85.3 (133.6) Wh/pkm as the volume of passengers exceeded the pre-pandemic figures. In 2019, before the COVID-19 pandemic, the corresponding figure was 92.4 Wh/pkm.

In rail logistics, relative energy consumption increased by 4 per cent to 47.5 (45.5) Wh/tkm. Energy efficiency was affected by the discontinuation of Eastern traffic on the one hand and the growth of domestic roundwood transport operations on the other hand. Domestic trains are smaller than the trains used in Eastern traffic, and empty roundwood wagons have high air resistance.

VR Group has ordered 60 new Dr19 diesel locomotives from Stadler. The locomotives are much more energy-efficient than their predecessors, and they will be mainly used in freight traffic. The first Dr19 locomotives were delivered for testing in 2022. The tests ensure the functionality of the locomotive on the Finnish railway network. The first new locomotives will start commercial traffic in 2023. There is still a need for diesel locomotives, as only slightly more than half of the Finnish railway network has been electrified. VR aims to maximise the amount of electric hauling, but in the future, other power sources will also be needed in addition to fossil-free electricity. The structure of the new locomotive has been designed so that diesel can, in the future, be replaced with a more climate-friendly energy source, once sufficiently competitive and reliable alternatives are available on the market. In addition, the exhaust and noise emissions of these locomotives are significantly lower than those of previous stock.

We also planned and implemented energy efficiency improvement measures at our properties, including upgrades to lighting. VR Group connected its first properties to the virtual power plant system that enables the balancing of the main grid in 2020, and new electricity loads will be added to the service where possible.



## Energy consumption, GWh

Own energy consumption	2022	2021	2020	2019
Fuels, renewable	118.7	52.6	52.6	29.2
Change	66.1	-	23.4	3.7
Fuels, non-renewable	259.5	289.1	293.9	346.4
Change	-29.6	-4.8	-52.5	-56.3
Electricity	591.5	638.3	657	730.0
Change	-46.8	-18.7	-72.9	-33.4
District heating	63.4	68.1	52.6	66.0
Change	-4.7	15.5	-13.3	-19.0
District cooling	1	0.9	0.9	1.1
Change	0.1	-	-0.2	-0.1
<b>Total</b>	<b>1,034.1</b>	1,049.0	1,057.1	1,172.7
Change	-14.9	-8.1	-115.6	-105.2

## Energy consumption of subcontractors

Fuels, renewable	0	0	0	0
Fuels, non-renewable	135.7	137.8	98.1	127.3

## Energy intensity

Energy consumption per unit of output, unit	2022	2021	2020	2019
Passenger train services, Wh/pkm	85.3	133.6	135.7	92.4
Rail logistics, Wh/tkm	47.5	45.5	44.7	45.4
Bus traffic, l/100 km	25.4	26.4	30.6	30.3
Road logistics, l/100 tkm	1.6	1.6	1.7	-

The key figure for road logistics does not include the TransitarOy transports.

## Increasing material efficiency

VR Group aims to prevent waste and increase material efficiency and recycling in its operations. Wastage is prevented and recycling is promoted by paying attention to reasonable procurement, working methods and work planning. We also promote material efficiency by putting up for sale rolling stock that we have decided to recycle.

The operations of VR Group that generate waste, in particular, include the maintenance of the rolling stock and cleaning of trains and properties. According to our environmental goals, we will increase our recycling rate to 80 per cent by 2025. The total volume of waste in 2022 was 7,973 (14,442) tonnes, of which 41% (65) was recycled for materials. The volume of waste and the recycling rate were both reduced by the fact that none of the train fleet was recycled during the year. Rolling stock is recycled periodically, which proportionally increases the amount of waste to be recycled. VR Group itself does not store or process waste. All waste is processed by external service providers.

VR FleetCare, the maintenance company of VR Group, put its waste management services up for tender in 2021 and 2022. A new hazardous waste agreement with Fortum entered into effect on 1 October 2021, followed by an agreement on non-hazardous waste with Remeo on 1 September 2022. Recycling and material efficiency will be developed through even closer cooperation with the new partners.

We take a wide range of measures to increase material efficiency. VR FleetCare extends the lifecycle of rolling stock and components by refurbishing components that need to be repaired and reinstalling them instead of replacing the components with new ones. The extension and optimisation of the lifecycle of rolling stock and components and the development of maintenance systems also offer opportunities for business growth. Rolling stock renovations and basic repairs are also carried out for operators outside VR Group.

Decommissioned textiles, such as old work clothes or sleeper car sheets, are recycled for new materials. They are used to produce new textile fibres as raw materials for various industrial sectors. In 2022, we joined forces with our partner Globe Hope to turn decommissioned sleeper car sheets into circular economy products that anyone can buy through VR's channels. In passenger services, Avekra has made extensive efforts over the years to reduce food waste, and we started a partnership with ResQ Club in November 2022 to sell unused food.

Procurement plays an important role from the point of view of both material efficiency and emissions. One of VR Group's environmental goals is that, in all new contracts, major suppliers are required to commit to continuous improvement. This requirement has been added to contract templates. Procurement and supply chains are described in more detail in the [Supply chains](#) section.

## Waste

	2022	2021	2020	2019
<b>Total amount/t</b>	<b>7,973</b>	14,442	13,580	13,128
Non-hazardous waste	<b>6,503</b>	12,860	12,348	11,475
Hazardous waste	<b>1,470</b>	1,582	1,232	1,652

## Processing method/t

Re-used as material	<b>3,291</b>	9,339	8,809	7,836
Re-used as energy	<b>4,495</b>	4,363	3,561	4,025
Disposal	<b>184</b>	714	875	1,146
Landfill	<b>3</b>	28	151	251
<b>Recycling rate (%)</b>	<b>41</b>	65	65	60

## Chemical safety

VR Transpoint annually transports a significant volume of production chemicals by rail. Chemicals are also used in the maintenance of the rolling stock. VR Group is committed to ensuring that, when handling, transporting or storing chemicals, its operations do not pollute the soil or the groundwater. There were no major chemical spills in the transport of dangerous goods or in the handling of chemicals in 2022.

Railway companies are required to have up-to-date safety reports for those shunting yards for dangerous goods that have been designated by the Finnish Transport and Communications Agency Traficom. Updating the safety reports is a continuous process that takes into consideration any significant changes in operations and transports. The situation is reviewed at least annually together with railway operators. Major emergency drills testing the functioning of the shunting yard's emergency plan and the collaboration between authorities and railway operators were organised at three different shunting yards for dangerous goods.

The aftercare of the 2018 environmental accident in Kinni, Mäntyharju, continued in 2022. In the accident, 35 tonnes of methyl tert-butyl ether (MTBE) leaked onto the ground. The MTBE concentrations of surface and groundwater and wells have been monitored in accordance with the monitoring plan approved by the environmental authorities. Significant MTBE concentrations have now only been observed in the immediate vicinity of the accident site.

VR Group manages several shunting yards, depots and refuelling site premises with soil contaminated decades ago. These contaminated areas are now being restored every year in connection with the upgrading of structures, construction of buildings or changing the use of the area. In 2022, soil restoration took place in areas including the former machine shop sites in Pasila and Turku.

The planning of stormwater treatment in the Ilmala area continued in cooperation with the Finnish Transport Infrastructure Agency. Stormwater is conducted from the area to a wastewater treatment plant. The purpose of the planning is to find a suitable treatment method for impurities in the stormwater so that it can be conducted to a rainwater sewer. Delays have been caused in the project by difficulties in finding a suitable site for the stormwater treatment equipment.

Groundwater monitoring required by the authorities was carried out at nine sites. At the Riihimäki depot, oil was removed from the area's groundwater by pumping.

In 2022, a total of EUR 2.7 (1.8) million was spent on soil and surface water surveys, clean-up and monitoring, including the restorative measures in Kinni.

### Significant chemical leakages

	2022	2021	2020	2019
Number of leakages	0	0	3	0

## Environmental risks and opportunities and economic impacts caused by climate change

The most significant environmental risks caused by VR Group's operations are related to accidents that may cause contamination of soil and groundwater and other environmental damage. VR Group also manages several shunting yard, depot and refuelling site premises where soil contamination, which occurred decades ago, requires comprehensive risk management. Additionally, restrictions and requirements due to disturbance caused by noise and vibration impair the operating conditions of rail traffic.

Mitigating climate change requires both increasing energy efficiency and reducing emissions. VR Group has expanded its emissions accounting in line with the GHG Protocol (GHG Protocol Corporate Accounting and Reporting Standard) so as to provide an increasingly comprehensive view of VR Group's impact on climate change. VR Group's environmental goals are focused on increasing energy efficiency and reducing greenhouse gas emissions.

In 2022, VR Group started the processing of climate risks and opportunities in accordance with the Task Force on Climate-related Financial Disclosures (TCFD) framework. We addressed risks related to climate change adaptation for the first time in our assessment of business risks. The risks caused by climate change to train traffic are mostly related to the effects of extreme weather conditions, such as storms, floods and heatwaves, on traffic and the railway network. They cause delays and increase costs. Other risks to VR Group's operations arising from climate change include significantly rising energy costs and other costs, disruptions to subcontractor partnerships or supply chains, and risks related to fleet lifecycle management.

Public transport and rail traffic, in particular, play a key role in mitigating climate change. An electric train is a more environmentally friendly option than other modes of transport. It produces less emissions and consumes less energy than other modes of transport. In addition, VR Group has used electricity produced with fossil-free energy since 2008. VR Group also offsets the greenhouse gas emissions of its passenger train service routes in Finland on which electrically driven traffic is not possible.

Mitigating climate change provides rail traffic with new growth opportunities, with people paying increasing attention to the carbon footprint of their activities, and the shift in attitude to favour public transport increases the number of passengers on trains and the amount of goods transported by rail.

The economic impacts of climate change have not been assessed in monetary terms, because the data required for that is not available.

## Biodiversity

VR Group conducted a preliminary assessment of its nature impacts in 2022. In the assessment, we identified a set of measures that VR can take to promote biodiversity. The measures were related to areas including procurement and supply chains, land use and properties, as well as cooperation and advocacy. We will continue our biodiversity-related efforts by carrying out a more detailed assessment of our impacts on nature.

## Other environmental topics

In June 2022, a corporate fine was imposed on VR Group for an environmental accident that took place in Kinni in Mäntyharju in spring 2018. There were no other violations of environmental legislation in 2022.

VR Group requires its suppliers to operate responsibly and comply with the Code of Conduct for Suppliers, whereby the supplier undertakes to comply with all applicable environmental laws and regulations at the minimum and work systematically and proactively to promote environmental responsibility. Suppliers also have to commit themselves to ensuring that their supply chains comply with the same requirements. A total of 16 EU tenders were completed in 2022. The rate of using environmental criteria in these tenders was 75% during the year, compared to 17% in the previous year. The increase is attributable to the different project types in 2022.

### Breaches of environmental legislation and regulations

	2022	2021	2020	2019
Number of breaches	1	0	0	0

### Share of new suppliers assessed in accordance with the environmental criteria

	2022	2021	2020	2019
Share of suppliers, %	75	17	43	50

## CASE

### Energy efficiency programme

The 2022 European energy crisis, the reduced availability of electricity and the rising price of electricity affected Finnish society across the board. VR Group is a major user of electricity, representing approximately 1% of the country's total electricity consumption. Most of the electricity we use – approximately 90% – is consumed by train operations. Real estate is our second-largest category of electricity consumption.

We want to do our part to help society with the challenging energy situation. The actions we take have an impact on the sufficiency of electricity and peaks in consumption. In 2022, VR Group launched an energy efficiency programme with the aim of improving energy efficiency by 5–10%. The measures under the programme include promoting economical driving methods, improving traffic and train fleet planning, improving the energy consumption of railway yards and making better use of data and analytics in monitoring energy consumption. Stakeholder collaboration, such as with traffic control, also plays a key role in improving the energy efficiency of rail traffic.

The purpose of our energy programme is to ensure that we deploy all of the tools we can use to strengthen proactive measures and preparedness and to realise the potential for energy savings in the near future. The programme also extends beyond short-term goals and includes longer-term development. As the energy programme progresses, we will look at longer-term measures to support the transition towards renewable energies and to ensure that we make the most energy-efficient and environmentally friendly choices possible in the procurement of new rolling stock.



# Green Bond report 2022

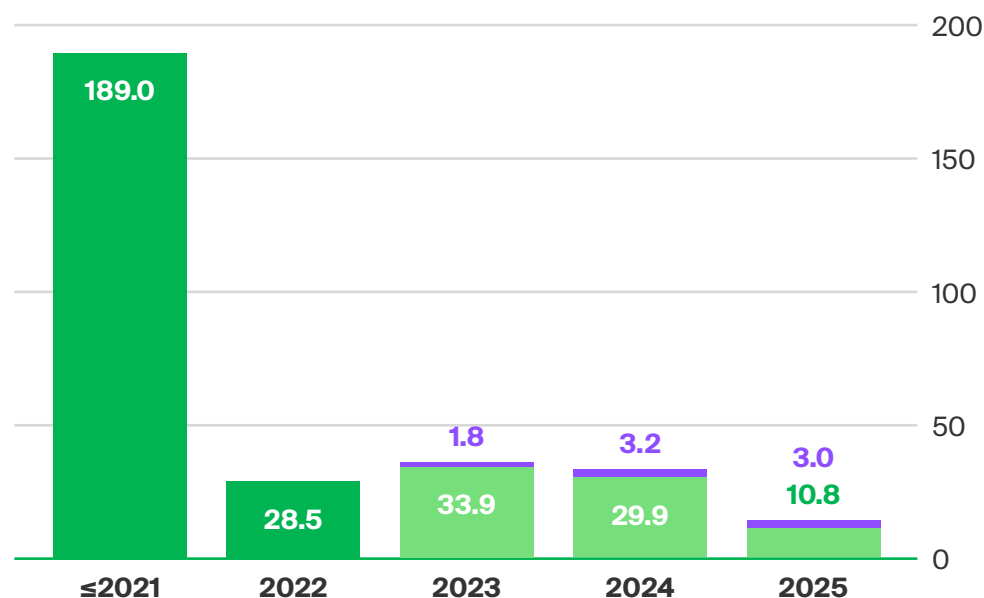
## Key information on the bond and asset allocation

### Key information on the bond

Issuer	VR Group Plc
Issuer's credit rating	A+ (stable), S&P
Second Party Opinion	Dark green by CICERO
Bond type	Senior unsecured green
Listing	Nasdaq Helsinki
Nominal value	EUR 300 million
ISIN	FI4000523287
Bond rating	A+ by S&P
Issue date	30 May 2022
Maturity date	30 May 2029
Tenor	7 years
Coupon	2.375% fixed
Unallocated proceeds	EUR 82.5 million / 28%
Allocated proceeds	EUR 217.5 million / 72%
Refinancing	EUR 189.0 million
Financing	EUR 28.5 million

Categories used (EUR million)	Allocated	Unallocated	Total
<b>Clean transportation</b>			
Sr3 electric locomotives	217.5	74.6	292.1
Heavy maintenance of Sr3 electric locomotives	0,0	7.9	7.9
<b>Total</b>	<b>217.5</b>	<b>82.5</b>	<b>300.0</b>

### Expected annual allocation (EUR million)



- Allocated, Sr3 electric locomotives
- Unallocated, Sr3 electric locomotives
- Unallocated, heavy maintenance of Sr3 electric locomotives

## Green Bond report 2022

### Sr3 attributes and impact analysis

#### Summary of realised positive environmental impacts 2018–2022

- Savings in electricity consumption range from 26 to 40 GWh, depending on the specific consumption coefficients used.
- The Last Mile feature has reduced emissions by approximately 655 tCO<sub>2</sub>e.
- Reductions in energy consumption and emissions per invested funds:
  - Electricity consumption as much as 184 MWh / EUR million
  - Emissions 3.0 tCO<sub>2</sub>e / EUR million



#### The Sr3 is our most efficient and ecological locomotive

- Maximum output: 6,400 kW (8,700 hp).
- The Last Mile feature (two diesel engines for running on non-electrified railway sections) reduces emissions.
- About 20% more energy-efficient than the previous Sr2 model.
- Recyclability rate: 98%.

#### Technical attributes related to energy efficiency

- The Sr3 features a more efficient regenerative braking system than Sr2 locomotive. When electric braking is used, it transforms the braking energy into electricity and feeds it into the electrical network.
- Electricity consumption in standby mode is lower and less waste heat is generated than in Sr2.
- The Sr3 features LED lighting technology that uses electricity conservatively.
- Metering enables the monitoring and analysis of energy consumption.

#### Analysis of the energy consumption of the Sr3

- The first assessments of selected trains indicate a reduction in electricity consumption of as much as 20% compared to the Sr2 locomotive. According to a preliminary analysis of data at the monthly level, the Sr3's electricity consumption is, on average, 10% lower than that of the Sr2. A more comprehensive consumption analysis will be conducted in 2023.
- Electricity consumption depends on speed, train type, route, weather conditions and whether electric braking can be utilised.
- The savings in electricity consumption in 2018–2022 have been calculated in two ways:
  - Using the manufacturer's specific consumption factors: 26 GWh
  - Using the specific consumption factors obtained from a preliminary data analysis: 40 GWh
- The Last Mile feature has reduced the use of fossil light fuel oil by 250,000 litres, or 2.4 GWh, which corresponds to a reduction in emissions of approximately 655 tCO<sub>2</sub>e (2018–2022).





Responsibility promise of  
corporate social responsibility

**We increase Finland's well-being**



## Corporate social responsibility



### We increase Finland's well-being



For VR Group, the key objective of corporate social responsibility is to increase the volume and share of environmentally friendly rail traffic and other public transport. VR Group makes smooth everyday transport and industry transport possible and, consequently, supports the sustainability goals of customers and society. As a significant operator in society, VR Group continuously strives to build cooperation with its stakeholders in a way that helps both VR Group and our customers achieve national and global goals related to climate and energy efficiency, for example.

Through continuous dialogue, we promote green investments that drive Finnish society towards sustainable growth. An important theme for VR Group is the development of a sustainable transport system, both nationally and regionally. Well-functioning rail infrastructure that allows for competitive travel times and seamless door-to-door services promotes tourism, commuting and accessibility of regions in general. Increasing the capacity of the railway network and modernising the tracks reduces emissions, increases the mobility of the workforce and supports the competitiveness of industrial sector, as well as Finland's security of supply.

Social responsibility is also a key perspective in VR Group's sustainability. The train is the most equal mode of transport. Nearly everyone can travel by train thanks to fair pricing and the extensive railway network. Up to 95% of Finns live less than 50 km from a railway station. We aim to serve all our customer groups well and take the accessibility of our services into account, for example.

In promoting accessibility, we have focused heavily on stakeholder collaboration by arranging accessibility meetings with various organisations representing people with disabilities. We engage in continuous cooperation with various stakeholders to make travel as accessible as possible. There are several parties responsible for the development of accessibility at railway stations. The Finnish Transport Infrastructure Agency is responsible for platforms and their static signage, while Fintraffic Raide Oy is responsible for dynamic passenger information. Property owners hold a significant role in the development of accessibility in station buildings and their immediate vicinity. Depending on the station, the property owners include municipalities, VR Group, private operators and Senaatin asema-alueet Oy. In 2022, we carried out a nationwide accessibility assessment of train station platforms. We found that accessibility information is fragmented from the passenger's perspective. In response to this finding, we will provide more content on accessible train travel and make the information easier to find in our digital channels.

VR Group paid special attention to children and young people in 2022. This was a natural decision, as 2022 was the European Year of Youth, and young people are also a significant customer segment that has a strong presence in the day-to-day operations of VR Passenger Services in particular. We engaged in cooperation with three Finnish organisations that promote the well-being of children and young people: Children of the Station, Nuorisotyö Raiteilla (NTR) and the Finnish National Youth Council Allianssi. Our cooperation with NTR was focused on piloting a new youth-focused conductor model on commuter trains, and the pilot was also extended to station environments in collaboration with Children of the Station. Our cooperation with Allianssi involved carrying out a youth survey on young people's dreams and travel.

VR Group has supported the development and well-being of Finnish society throughout the company's 160-year history. It is important for us to take action to promote young people's inclusion and participation in society and to help young people get their voices heard. In line with this idea, we invited young Finnish climate delegates to deliver a speech at VR Group's 160th anniversary celebration. In our milestone year, we also wanted to support young people's creativity and promote their dreams through art. A team of young filmmakers was closely involved in the production of a short film on VR's 160-year journey. The film was produced as part of a collaboration between VR Group and the Red Carpet film festival, which also included a film camp for young people and a gallery takeover at the Villa Arttu gallery in Hyvinkää, organised by the Young Art forum.

Russia's invasion of Ukraine came as a tremendous shock, and we at VR Group wanted to show our support and compassion for the people of Ukraine. Starting in March, we offered persons holding Ukrainian passports free-of-charge travel on VR's long-distance and commuter trains. The aim was to provide easier journeys for refugees entering Finland and to help them reunite with family and friends. Ukrainian citizens took 126,800 journeys free of charge on VR's trains. We also marked our 160th anniversary by donating EUR 160,000 to humanitarian aid in Ukraine. The donation was particularly targeted at aid organisations specialising in helping children and young people.

As a state-owned company, VR Group is required to seek pioneering approaches in different areas of sustainable development and responsibility by increasing our handprint in society. VR Group also wants to promote well-being in society as a major taxpayer in Finland and Sweden and as a distributor of dividends in Finland.



"We work together" is one of VR Group's three values. Our responsibility promise of corporate social responsibility and our efforts for it are one of the ways in which this value is present in our work. This value means that we work together, listen to and learn from each other. We engage co-workers, customers, partners and stakeholders in collaboration.

## Corporate social responsibility KPIs

The indicators related to corporate social responsibility are included in the indicators of other areas of responsibility and in the financial indicators. The goal of increasing the volume of electric public transport and environmentally friendly rail traffic is measured by the development of number of journeys and tonnes transported. A significant tax footprint and dividend for the Finnish state is made possible by growing, more efficient and profitable business operations.

## Human rights and anti-corruption activities

VR Group adheres to a Code of Conduct that includes anti-corruption guidelines. The Code of Conduct is available to the public on the VR Group website and to the company's personnel on the intranet. All VR Group employees are required to complete training on the Code of Conduct, and all newly recruited employees are instructed to complete the training when they join the company. We also have separate anti-corruption guidelines and related training for key personnel and supervisors.

VR Group encourages its personnel to report all suspected irregularities and violations of the Code of Conduct. The company has an anonymous whistleblowing channel for reporting suspected irregularities. Reports received through the whistleblowing channel in 2022 were appropriately processed. No significant corruption-related risks were identified or considered to have been realised in 2022.

## CASE

**Youth conductors in VR's commuter traffic**

Due to the nature of their work, conductors interact with young customers on a daily basis. One of the main goals of our responsibility efforts in 2022 was to take young people into consideration even better than before and to ensure that their voice is heard.

VR piloted a youth conductor model in its commuter traffic in partnership with Nuorisotyö Raiteilla (NTR). The aim is to create as many positive encounters with young people as possible. Youth conductors are VR commuter traffic conductors who engage in active and positive discussions with young customers as they perform their usual duties. Interaction with youth conductors brings VR closer to young people, for whom travelling by train is part of everyday life. With the first pilot project resulting in positive experiences and observations, the decision was made to continue the project.

Starting in November, the youth conductors spend part of their shifts visiting commuter trains and stations together with youth workers from NTR and Children of the Station. The routes are chosen based on where young passengers are primarily found, and most of the shifts take place in the evening. According to the feedback we have received from the target audience, conductors are now perceived as more approachable and our young customers feel comfortable asking the conductors for assistance.





## Supply chains

VR Group's procurement activities are guided by the procurement guidelines updated in late 2019, in addition to which our operations are based on procurement strategies and instructions for supplier management. The total value of VR Group's purchases was slightly over EUR 650 million in 2022, which is approximately 35% more than in 2021. VR Sweden's purchases are included in the total value from 1 July 2022 onwards.

The impacts of the pandemic, which began in 2020, still had some effect on procurement in 2022. In addition, the year under review was characterised by the impact of inflation, particularly in the area of energy purchases. Russia's invasion of Ukraine has also had partial impacts on procurement, but the effects will be reflected more clearly in procurement in the years to come, depending on how long the situation continues, and when the adaptation of VR Group's Russia-related operations has been fully completed.

As in previous years, the majority of purchases particularly concerned rolling stock investments in rail and road, transport subcontracting, maintenance of the rolling stock, and energy and IT purchases. VR Group's purchases were divided between some 4,700 suppliers, with slightly over 30 suppliers representing more than half of the total value of purchases. The largest individual suppliers were related to rolling stock investments, other purchases related to rolling stock, and energy purchases. VR Sweden's share has been taken into account in the data, starting from 1 July 2022.

Of the total value of the purchases of VR Group's Finnish companies in 2022, approximately 88% concerned suppliers registered in Finland (the figure includes certain manual corrections to further specify the local impact). Of the total value of VR Sweden's purchases since 1 July 2022, approximately 98% concerned suppliers registered in Sweden (the figure includes certain manual corrections to further specify the local impact). Other than suppliers registered in Finland and Sweden, most of VR Group's purchases were made from suppliers registered in other European countries.

We have established a process for ensuring the responsibility of procurement, which includes approval of VR Group's Code of Conduct and risk country assessments for all suppliers, self-assessments for suppliers of annual purchases worth more than EUR 100,000, Vastuu Group audits for contracts subject to the Act on the Contractor's Obligations and Liability when Work is Contracted Out, and potential additional assessments and audits. We also deployed this process in VR Sweden in late 2022.

In order to supply products and/or services to VR Group, suppliers must accept VR Group's Code of Conduct for Suppliers, which deals with ensuring legal compliance and conformity with international sanctions, suppliers' ethics, human rights and labour rights, and the environment. These terms and conditions are an essential part of VR Group's bidding and contract process, in which suppliers are also required to make sure that their own supply chains are committed to the same terms and conditions. In tenders pursuant to the Act on Public Contracts in Special Sectors, completing the ESPD form (European Single Procurement Document) is mandatory. With the form, the bidder confirms that the exclusion criteria are in order and the requirements for eligibility are met. In contracts subject to the Act on the Contractor's Obligations and Liability when Work is Contracted Out, we also require our suppliers to fulfil the obligations stipulated by the legislation in question. Our terms of contract also require suppliers to take a self-assessment questionnaire and pursue continuous improvement in environmental matters.

The cornerstones of assessing the social responsibility of suppliers include risk country assessments, ensuring compliance with the Act on the Contractor's Obligations, and acceptance of VR Group's Code of Conduct, which includes requirements concerning human rights and employee rights. The assessment of the environmental responsibility of suppliers is discussed in more detail in the section Other environmental topics.

We send a self-assessment questionnaire to each supplier for whom our purchase value exceeds EUR 100,000 per year and for whom we do not have a valid self-assessment result. Based on the self-assessment, we classify suppliers into five different risk categories, on the basis of which the supplier may be asked to provide additional clarifications and/or third-party audits. In early 2022, we sent the questionnaire to over 350 suppliers, and related requests for further clarification were sent to just over 40 suppliers. In 2022, approximately 470 suppliers had submitted valid responses to the self-assessment questionnaire. VR Sweden is not included in the self-assessment results for 2022.

While we identified areas for development during the self-assessments and further reviews, we did not observe severe violations in supply chains. At the beginning of 2023, we will send our updated self-assessment questionnaire to significant suppliers for whom we do not have a valid self-assessment questionnaire result, and suppliers classified in the two lowest risk categories based on their previous self-assessment questionnaire. Completing the self-assessment questionnaire at the required intervals will continue to be a prerequisite for maintaining supplier status.

## Tax footprint

Companies belonging to VR Group pay their taxes and other statutory charges in accordance with the local tax legislation and regulations. In addition to Finland, VR Group had companies registered in Latvia, Norway, Sweden and Russia in 2022. Taxes were paid almost entirely to Finland until 30 June 2022. After VR Group acquired a significant business in Sweden in a transaction completed on 1 July 2022, tax payments began also in Sweden.

## Country-by-country tax report information

VR Group provides the Finnish tax authorities with an annual country-by-country report on taxes. The Finnish Government issued a guideline (VN/15411/2022) on 7 June 2022, according to which companies that are majority-owned by the state are required to publish country-by-country tax report information starting in 2022. VR Group is publishing this information for the first time for 2022. The country-by-country tax report presents certain key figures on taxes by country of operation. The information can be used to determine which countries the company pays taxes to. The transparent reporting of tax information is part of corporate responsibility. In 2022, VR Group had operations in Finland, Sweden, Russia, Norway and Latvia. VR Group acquired the entire share capital of VR Sweden, a Swedish entity, on 1 July 2022. The figures for VR Sweden and its subsidiaries are presented for VR Group's ownership period, 1 July–31 December 2022.

VR Group's tax strategy was published in full on the VR Group [website](#) in early 2023. The tax strategy also describes the organisation of tax affairs in VR Group.

## Figures for the financial year 2022

	Finland 2022	Sweden 2022	Russia 2022	Latvia 2022	Norway 2022	Total 2022	Total 2021	Total 2020
<b>Taxes paid for the financial year, EUR million</b>								
Income taxes	1.9	0.0	0.0			<b>1.9</b>	8.9	2.9
Real estate taxes	1.7					<b>1.7</b>	1.6	1.6
Employer's contributions (only social security contributions)	4.1	17.9	0.0	0.1	0.0	<b>22.1</b>	4.5	4.4
Other taxes (if any)						<b>0.0</b>	0.1	0.7
<b>Taxes accounted for the financial year, EUR million</b>								
Value added taxes, sales	212.4	13.2	-0.2			<b>225.6</b>	181.5	88.1
Value added taxes, purchases	-207.4	-19.8	0.0			<b>-227.4</b>	-174.2	-162.6
Withholding taxes from salaries	78.6	15.0	0.0	0.1	0.0	<b>93.7</b>	72.6	72.1
Other taxes (if any)			0.0			<b>0.0</b>	0.0	0.7
<b>Taxes paid and accounted, total</b>	<b>91.1</b>	<b>26.3</b>	<b>-0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>117.6</b>	<b>95.0</b>	<b>7.0</b>
<b>Net sales by country, EUR million</b>	<b>954.3</b>	<b>151.0</b>	<b>1.7</b>	<b>0.0</b>	<b>0.0</b>	<b>1,107.0</b>	<b>842.0</b>	<b>796.9</b>
<b>Internal net sales by country, EUR million</b>	<b>222.5</b>		<b>0.8</b>	<b>0.0</b>	<b>0.0</b>	<b>223.2</b>	<b>185.2</b>	<b>186.9</b>
<b>Income from non-related parties, EUR million</b>	<b>1,031.7</b>	<b>161.2</b>	<b>13.7</b>	<b>0.0</b>	<b>0.0</b>	<b>1,206.6</b>	<b>901.9</b>	<b>832.4</b>
<b>Income from related parties, EUR million</b>	<b>267.4</b>	<b>6.7</b>	<b>0.8</b>	<b>0.0</b>	<b>0.0</b>	<b>274.9</b>	<b>223.3</b>	<b>224.5</b>
<b>Taxes recognised through P&amp;L, EUR million</b>	<b>0.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.7</b>	<b>13.0</b>	<b>3.7</b>
<b>Profit before taxes by country, EUR million</b>	<b>12.9</b>	<b>-3.1</b>	<b>2.6</b>	<b>0.0</b>	<b>0.0</b>	<b>12.4</b>	<b>-28.0</b>	<b>-86.3</b>
<b>Tangible assets, EUR million</b>	<b>1,655.4</b>	<b>84.1</b>	<b>14.2</b>	<b>0.0</b>	<b>0.0</b>	<b>1,753.7</b>	<b>1,547.8</b>	<b>1 437.7</b>
<b>Book value of equity (without retained earnings), EUR million</b>	<b>397.5</b>	<b>41.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>438.8</b>	<b>384.3</b>	<b>336.4</b>
<b>Retained earnings, EUR million</b>	<b>446.8</b>	<b>-23.4</b>	<b>1.4</b>	<b>0.0</b>	<b>0.0</b>	<b>444.8</b>	<b>495.5</b>	<b>614.4</b>
<b>Number of employees (FTE by country)</b>	<b>5,704</b>	<b>1,132</b>	<b>3</b>	<b>6</b>	<b>1</b>	<b>6,846</b>	<b>5,620</b>	<b>5,818</b>



## Information on Group companies

Company	Domicile	Purchasing or procurement	Administration, management or support services	Provision of services to non-related parties	Group's internal financing	Ownership of shares or stakes	No business operations during the period	Other	Description of other business
VR-Group Plc	Finland	●	●	●	●	●		●	Rental of real estate
VR FleetCare Ltd	Finland			●				●	Provision of maintenance services to related parties
Avecra Oy	Finland			●					
Oy Pohjolan Liikenne Ab	Finland			●					
SeaRail Oy	Finland			●					
Transitar Oy	Finland			●					
Oy Karelian Trains Ltd (shared function)	Finland							●	Rental of rolling stock to related parties
VR Group Sverige Ab	Sweden		●						
VR Sverige Ab (from 1 July 2022)	Sweden	●	●	●		●			
VR Service Ab (from 1 July 2022)	Sweden							●	Provision of fleet maintenance and cleaning services for related parties
VR Tåg Ab (from 1 July 2022)	Sweden						●		
VR Östgötapendeln Ab (from 1 July 2022)	Sweden			●					
Botnietåg Ab (from 1 July 2022)	Sweden						●		
VR FleetCare Ltd's permanent establishment in Sweden	Sweden		●						
VR Norge AS	Norway						●		
Norwegian branch of VR-Group Plc (NUF)	Norway		●						
LLC Finnlog	Russia							●	Provision of logistics services to related parties
Russian delegation of VR-Group Plc	Russia		●						
SIA VR Services Latvia	Latvia		●						

## Reporting principles and assurance

The information presented in this corporate responsibility report is for the period 1 January–31 December 2022. VR Group publishes a corporate responsibility report annually. The report includes information on all VR Group subsidiaries, with certain exceptions mentioned below. The report covers VR Group's operating segments: VR Passenger Services, VR Transpoint (logistics business), VR FleetCare (maintenance) and other operations, which include Train operations, The Property unit and Common functions.

VR expanded its operations into the Swedish contract traffic market on 1 July 2022, when VR Sverige became part of VR Group. VR Sverige operated under VR Passenger Services from 1 July 2022 to 31 December 2022. Due to the integration process being incomplete at the time of publishing this report, information on VR Sweden's responsibility could not be fully integrated into VR Group's other responsibility information.

## Safety and security

Safety performance indicators are based on data from VR Group's internal safety reporting system. Frequency indicators are based on incidents concerning VR Group's own personnel. VR Sweden's information is not included in the safety performance figures. Instead, it is presented separately in the report. Key observations concerning VR Sweden are included in the text sections of the report.

## Customer orientation

Customer orientation indicators are based on customer experience measurements and train punctuality data. The main observations concerning VR Sweden's customer orientation are highlighted in the text sections of the report. Values for the performance indicators are not specified for VR Sweden, as the customer experience is measured separately per contract in Sweden. At the end of 2022, VR Sweden had seven contracts in effect.

## Employee experience

Employee experience indicators are reported on the basis of data obtained from personnel data and payroll systems in Finland and Sweden. The number of employees is presented as full time equivalents (FTE), and FTEs are calculated as the average of the reporting periods.

There were 12 reporting periods in Finland (1 January–31 December 2022) and six reporting periods in Sweden (1 July–31 December 2022). Consequently, the actual man-years in Sweden presented in the report are half of the figures for the full work-year.

We conducted two employee satisfaction surveys in Finland in 2022: a comprehensive survey in March and a shorter survey in December. The results of the more comprehensive survey are reported in the table "Key indicators for employee experience". Owing to the fact that an identical employee satisfaction questionnaire has not been conducted in Sweden since the acquisition was completed on 1 July 2022, the outcomes for employee experience indicators ("Recommendation index" and "Supervisor index") are reported only for Finland. However, in December 2022, we did carry out an employee satisfaction survey in Sweden that was limited in scope and focused on the employee Net Promoter Score (eNPS) and leadership index as the indicators being measured. The results of the survey are reported as part of the table "Key indicators for employee experience".

## Environmental responsibility

The reported environmental indicators cover VR Group's operations in Finland. VR Sweden's data is included in the environmental figures only where specifically mentioned. Data on subcontractors' operations is not reported. However, the fuel consumption figures and emission data include data on VR Transpoint's road logistics subcontractors, because road logistics operations are mainly carried out using subcontractors' fleet. Transitar Oy's transports are not included in the energy and emission efficiency figures of road logistics for performance-related calculation technical reasons. Transitar is included in the total amounts of energy and emissions.

The environmental figures concerning energy consumption and waste are based partly on monitoring data collected from VR Group's operating units and partly on suppliers' reports and invoicing. The origin of electricity and the energy sources used in electricity production are based on data from electricity suppliers.

VR Group's accounting for greenhouse gas emissions follows the Greenhouse Gas Protocol prepared by the World Resources Institute and the World Business Council for Sustainable Development. The accounting is based on the operational control boundary approach.

Carbon dioxide equivalent emission factors have been used as the emission factor whenever they have been available. The most recent published data is used as the factors. The sources of emission factors are the energy companies used by VR Group, the Energy Spreadsheet Service, VTT's Lipasto calculation system for traffic exhaust emissions, the global Exiobase input-output analysis model funded by the EU and the emission factor tables published by the UK Department for Environment, Food & Rural Affairs (DEFRA). The five-year average published by Statistics Finland has been used in location-based accounting for electricity emissions and emissions accounting for district heat. The impacts on climate warming have been assessed in accordance with the IPCC's Fourth Assessment Report (AR4 – 100 years).

The emission factors of VTT's Lipasto system and Rastu project have been used in accounting for fine particulate (PM) and nitrogen oxide (NO<sub>x</sub>) emissions.

## Corporate social responsibility

Supply chain indicators are based on information collected and produced by VR Group. The indicators for VR Sweden are produced by VR Sweden, and it is noted separately in each section whether or not they are included in VR Group's indicators.

## External assurance

This report has been subject to limited assurance. The assurance engagement was carried out by Ecobio Oy, which is an assurance body independent of VR Group. For selected information, Ecobio Oy assessed the process for producing and governing the data, management systems and reporting systems, as well as the materiality, scope, accuracy and comparability of the reported data. The GRI Standards and the GHG Protocol were used as the assurance criteria. The assurance engagement was carried out in accordance with the AA1000 assurance standard, and the assurance body was approved by representatives of VR Group's management team. VR Group's practice is to obtain external assurance for the report each year, and the company's management has approved this practice.

## GRI content index

At VR Group, responsibility is part of day-to-day operations and the company's strategy. In its responsibility reporting, VR Group complies with the Government Resolution on Ownership Steering Policy from 2020 and guidelines for reporting on country-specific taxes for majority state-owned companies from 2022. In addition to the responsibility report, the Group voluntarily prepares a statement of non-financial information, pursuant to chapter 3a of the Finnish Accounting Act 1336/1997, applied from the European Parliament and Council Directive 2014/95/EU. To ensure comparability, management has also selected supplementary indicators compliant with the international GRI (Global Reporting Initiative) framework, which are in line with the requirements of the GRI standard.



## General

Code	GRI content	Location	Comments
2-1	Organisational details	b: <a href="#">Report of the Board of Directors › Share capital and shares ›</a> c: <a href="#">Notes to the consolidated financial statements ›</a> d: <a href="#">Report of the Board of Directors › Business operations ›</a>	a: VR-Group Plc
2-2	Entities included in the organisation's sustainability reporting	<a href="#">Reporting principles and assurance</a>	
2-3	Reporting period, frequency and contact point	a: <a href="#">Reporting principles and assurance</a> b: <a href="#">Notes to the consolidated financial statements › General accounting principles ›</a> c: 7 March 2023 d: <a href="#">VR Group › Info › For the media ›</a>	
2-4	Restatements of information	a: No restatements of information.	The previously reported data has not changed so significantly as to impact the whole.
2-5	External assurance	a: <a href="#">External assurance</a> b: <a href="#">Independent assurance statement</a>	
2-6	Activities, value chain and other business relationships	a: <a href="#">Report of the Board of Directors › Business operations ›</a> a: <a href="#">VR Group › Our company › Business operations ›</a> b: <a href="#">Report of the Board of Directors › Business operations ›</a> b: <a href="#">VR Group › Our company ›</a> c: <a href="#">Report of the Board of Directors › Description of the business model ›</a> d: <a href="#">Report of the Board of Directors › Changes in corporate structure ›</a>	
2-7	Employees	<a href="#">Table 2-7 Personnel figures</a> <a href="#">Reporting principles and assurance</a>	
2-8	Workers who are not employees	Not applicable	The share of external labor of the total labor force of VR Group is not significant. About 200 temporary employees work in maintenance.

2-9	Governance structure and composition	<p>a: <b>Corporate Governance Statement ›</b></p> <p>a: <b>Report of the Board of Directors › Governance ›</b></p> <p>b: <b>Corporate Governance Statement › Committees ›</b></p> <p>c. i: <b>Corporate Governance Statement › President and CEO and Management Team ›</b></p> <p>c. ii, iv, vi, viii: <b>Corporate Governance Statement › VR-Group Plc's Board of Directors 2022 ›</b></p> <p>c. iii <b>Corporate Governance Statement › Composition and activities of the Supervisory Board, Committees, Board of Directors ›</b></p> <p>c.v: <b>Table 2-9 Diversity of governance bodies</b></p> <p>c.vi: Not applicable</p>	<p>c. vi: No specific minority groups with no representation on the governing bodies have been identified</p>
2-10	Nomination and selection of the highest governance body	<b>Corporate Governance Statement › Board of Directors ›</b>	
2-11	Chair of the highest governance body	Not applicable	The Chair of the Board of Directors is independent of the company and its shareholders.
2-12	Role of the highest governance body in overseeing the management of impacts	<p>a: <b>Responsibility management</b></p> <p>b: Information unavailable</p> <p>c: Information unavailable</p>	<p>b, c: The Board of Directors does not have separate processes for monitoring the sustainable development strategy. Instead, the Board of Directors monitors this as part of the other performance of top management.</p>
2-13	Delegation of responsibility for managing impacts	<b>Responsibility management</b>	
2-14	Role of the highest governance body in sustainability reporting	<b>Responsibility management</b>	
2-15	Conflicts of interest	<p>a: <b>Corporate Governance Statement › Audit Committee ›</b></p> <p>a: <b>Corporate Governance Statement › Related party transactions ›</b></p> <p>b: <b>Corporate Governance Statement › Related party transactions ›</b></p> <p>b: <b>Corporate Governance Statement › VR-Group Plc's Board of Directors 2022 ›</b></p>	

2-16	Communication of critical concerns	a: <b>Corporate Governance Statement › Internal audit ›</b> b: Confidentiality constraints	More detailed information is not provided due to confidentiality constraints.
2-17	Collective knowledge of the highest governance body		Responsibility is incorporated into the President and CEO's reporting to the Board of Directors. Separate training has not been organised because the Board of Directors' level of knowledge has been sufficient for decision-making.
2-18	Evaluation of the performance of the highest governance body	Not applicable	The Board of Directors evaluates its performance annually with an external consultant, but separate evaluations in accordance with the GRI definition are not carried out.
2-19	Remuneration policies	<b>Remuneration Policy 2023 and Remuneration Report 2022 ›</b>	
2-20	Process to determine remuneration	a: <b>Remuneration Policy 2023 and Remuneration Report 2022 ›</b> b: Not applicable	b: No voting
2-21	Annual total compensation ratio	Not applicable	Monitoring the GRI-determined indicator has been deemed to be irrelevant.
2-22	Statement on sustainable development strategy	<b>Responsibility as part of our business operations</b> <b>Responsibility carries us forward even in unusual times</b>	
2-23	Policy commitments	a, b: <b>Description of responsibility management</b> a, b: <b>Commitments and principles</b> a, b: <b>Material topics of responsibility</b> c: <b>VR Group Code of Conduct ›</b> c: <b>VR Group's Code of Conduct for Suppliers ›</b> c: <b>VR Group's environmental policy ›</b> d, e: <b>Description of responsibility management</b> f: <b>Supply chains</b> f: <b>Development of safety and security work and knowledge-based management</b> f: <b>Human rights and anti-corruption activities</b>	

2-24	Embedding policy commitments	a-i, a-ii: <b>Responsibility management</b> a-iii: <b>Supply chains</b> a-iv: <b>Development of safety and security work and knowledge-based management</b> a-iv: <b>Human rights and anti-corruption activities</b>	
2-25	Processes to remediate negative impacts	a, b, d: <b>Description of responsibility management</b> c, e: Not applicable	c: As a rule, negative impacts become known through the channels and mechanisms listed in the table Description of responsibility management.  e: There are numerous feedback mechanisms, appropriate training has been provided on each of them, and they are all accessible. It is not practical to specify.
2-26	Mechanisms for seeking advice and raising concerns	a-i: <b>VR Group Code of Conduct ›</b> a-ii: <b>Human rights and anti-corruption activities</b>	
2-27	Compliance with laws and regulations	<b>Other environmental topics</b>	
2-28	Membership associations	<b>VR Group › Our company › Operating environment › Our stakeholders ›</b>	
2-29	Approach to stakeholder engagement	<b>VR Group › Our company › Operating environment › Our stakeholders › Summary of stakeholders ›</b>	
2-30	Collective bargaining agreements		Collective agreements cover 95% of the personnel in Finland and 100% of the personnel in Sweden. In Finland, the terms and conditions of employment of persons not subject to collective agreements are determined on the basis of laws and employment contracts, and in accordance with separately agreed parts of other collective agreements used by the company (such as the collective agreement for clerical workers in the railway sector).



## Material topics

### GRI 3: Material topics 2021

3-1	Process to determine material topics	a: <b>Responsibility as part of our business operations</b> b: <b>VR Group › Our company › Operating environment › Our stakeholders ›</b> b: <b>VR Group › Our company › Operating environment › Our stakeholders › Summary of stakeholders ›</b>
3-2	List of material topics	<b>Responsibility as part of our business operations</b>

### Economic performance

3-3	Management of material topics	a: <b>Material topics of responsibility</b> a: <b>Safety and security management method and purpose</b> a: <b>Customer orientation measurement and key indicators</b> a: <b>Environmental responsibility</b> a: <b>Corporate social responsibility</b>  b: <b>Safety and security management method and purpose</b> b: <b>Reducing emissions</b> b: <b>Chemical safety</b> b: <b>Supply chains</b>  c: <b>GRI 2-23 Policy commitments</b>  d-i: <b>Safety and security management method and purpose</b> d-i: <b>Development of safety and security work and knowledge-based management</b> d-i: <b>Employee experience</b> d-i: <b>Environmental responsibility</b> d-i: <b>Human rights and anti-corruption activities</b> d-i: <b>Supply chains</b>  d-ii: <b>Description of responsibility management</b>  e-i, e-ii: <b>Description of responsibility management</b> e-i, e-ii: <b>Supply chains</b>  e-iii: <b>Key indicators of responsibility</b>  e-iv: <b>Development of safety and security work and knowledge-based management</b>  f: <b>Description of responsibility management</b>
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## Economic performance

201-1	Direct economic value generated and distributed	<a href="#">Table 201-1 Dividends, taxes and levies</a> <a href="#">Report of the Board of Directors › Statement of non-financial information ›</a>
201-2	Financial implications and other risks and opportunities due to climate change	<a href="#">Environmental risks and opportunities and economic impacts caused by climate change</a>
201-3	Defined benefit plan obligations and other retirement plans	<p>VR Group issued pensions to 137 persons in 2022 (2021: 173). Of these, 15 were permanent disability pensions (2021: 22) and 13 were partial disability pensions (2021: 18). The purpose of rehabilitation allowance, or fixed-term disability pension, is to allow the rehabilitee to return to work. With regard to occupational rehabilitation, a rehabilitation allowance was granted for vocational retraining or work try-outs to a total of 72 (2021: 84) persons with an imminent threat of incapacity for work. The average age of those retiring on old-age pension was 62.5 (2021: 62.4) years and of those retiring on disability or partial disability pensions 60.9 (2021: 60.9) years. For additional information about pensions, see the Financial statements 2022.</p>
201-4	Financial assistance received from government	<a href="#">Notes to the consolidated financial statements › Other operating income and expenses ›</a> <p>During the financial year, VR received public grants, the most significant of which were the COVID-19 support received by AVECRA's restaurant operations and the transport sector fuel subsidies received by several Group companies.</p>

**Indirect economic impacts**

<b>203-2</b>	Significant indirect economic impacts	<b>Report of the Board of Directors › Statement of non-financial information › Table 201-1 Dividends, taxes and levies</b>
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**Procurement practices**

<b>204-1</b>	Proportion of spending on local suppliers	<b>Supply chains</b>
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**Anti-corruption**

<b>205-1</b>	Operations assessed for risks related to corruption	All of VR Group's business and support units are included in the annual risk survey of risk management. No significant corruption-related risks were identified or considered to have been realised in 2022.
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**Anti-competitive behaviour**

<b>206-1</b>	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices	There were no pending or completed legal actions regarding anti-competitive behaviour in 2022.
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## Tax

<b>207-1</b>	Approach to tax	<b>Tax strategy ›</b>	The tax strategy was created in 2022 and published on 14 February 2023.
<b>207-2</b>	Tax governance, control and risk management	<b>Tax strategy ›</b>	Tax governance is part of the tax strategy created in 2022 and published on 14 February 2023.
<b>207-3</b>	Stakeholder engagement and management of concerns related to tax		VR Group does not have a separately defined programme for influencing taxation. VR Group indirectly participates in tax-related advocacy efforts through its membership in the Confederation of Finnish Industries, Service Sector Employers Palta and the Central Chamber of Commerce, for example. As part of its other advocacy efforts, VR Group also issues statements concerning EU-level regulations and national legislation to the Finnish Parliament and the Ministry of Transport and Communications, among others. One example of such regulatory developments is the legislative amendment concerning a value added tax rate of zero for public transport, effective from 1 January to 30 April 2023.
<b>207-4</b>	Country-by-country reporting	<b>Tax footprint</b> <b>Table 2-7 Personnel figures</b> <b>Financial statements 2022 › Group structure ›</b> <b>Financial statements 2022 › Income taxes ›</b>	

## Energy

<b>302-1</b>	Energy consumption within the organisation	<b>Increasing energy efficiency</b>	
<b>302-2</b>	Energy consumption outside of the organisation	<b>Table energy consumption</b>	
<b>302-3</b>	Energy intensity	<b>Table energy intensity</b>	
<b>302-4</b>	Reduction of energy consumption	<b>Increasing energy efficiency</b>	
<b>302-5</b>	Reductions in energy requirements of products and services	<b>Increasing energy efficiency</b>	



## Emissions

<b>305-1</b>	Direct (Scope 1) GHG emissions	<b>Table greenhouse gas emissions</b>
<b>305-2</b>	Energy indirect (Scope 2) GHG emissions	<b>Table greenhouse gas emissions</b>
<b>305-3</b>	Other indirect (Scope 3) GHG emissions	<b>Table Other indirect greenhouse gas emissions (Scope 3) by emission source</b>
<b>305-4</b>	GHG emissions intensity	<b>Table greenhouse gas intensity</b>
<b>305-5</b>	Reduction of GHG emissions	<b>Reducing emissions</b>
<b>305-7</b>	Nitrogen oxides (NO <sub>x</sub> ), sulfur oxides (SO <sub>x</sub> ) and other significant air emissions	<b>Reducing emissions</b>

## Waste

<b>306-1</b>	Waste generation and significant waste-related impacts	<b>Increasing material efficiency</b>	VR Group reports the waste generated in its own operations and the measures taken, and planned, to reduce the impacts of waste.
<b>306-2</b>	Management of significant waste-related impacts	<b>Increasing material efficiency</b>	Information on waste is based on reports obtained from the service providers.
<b>306-3</b>	Waste generated	<b>Increasing material efficiency</b>	

## Supplier environmental assessments

<b>308-1</b>	New suppliers that were screened using environmental criteria	<b>Other environmental topics</b>
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**Employment**

<b>401-1</b>	New employee hires and employee turnover	<b>Table 401-1 New employee hires and employee turnover</b>
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**Labour/management relations**

<b>402-1</b>	Minimum notice periods regarding operational changes	The negotiation period followed in restructuring is 2–6 weeks, the minimum notice period and negotiation right are specified in collective agreements.
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**Occupational health and safety**

<b>403-1</b>	Occupational health and safety management system	<b>Occupational safety</b>
<b>403-2</b>	Hazard identification, risk assessment and incident investigation	<b>Development of safety and security work and knowledge-based management</b>
<b>403-3</b>	Occupational health services	<b>Working capacity and well-being</b>
<b>403-4</b>	Worker participation, consultation and communication on occupational health and safety	<b>Occupational safety</b> <b>Development of safety and security work and knowledge-based management</b>
<b>403-5</b>	Worker training on occupational health and safety	<b>Development of safety and security work and knowledge-based management</b>
<b>403-6</b>	Promotion of worker health	<b>Working capacity and well-being</b>
<b>403-7</b>	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	<b>Development of safety and security work and knowledge-based management</b>

**Occupational health and safety**

**403-8** Workers covered by an occupational health and safety management system

**Working capacity and well-being**

**403-9** Work-related injuries

**Indicators of safety and security – Occupational safety****Table 403-9 Occupational safety in figures****Training and Education**

**404-3** Percentage of employees receiving regular performance and career development reviews

All personnel

**Diversity and equal opportunity**

**405-1** Diversity of governance bodies and employees

**Corporate Governance Statement 2022 ›****Table 2-9 Diversity of governance bodies****Table 2-7 Personnel figures**

**405-2** Ratio of basic salary and remuneration of women to men

**Table 2-9 Diversity of governance bodies**

The remuneration systems used in Finland are based on the applicable collective agreements. Personal contractual pay is proportioned to market salaries and salaries in other positions in the company. Wage equality is reviewed as part of the equality plan with regard to salaried positions. In these reviews, no significant differences have been observed in salaries and remuneration between women and men. In addition, a Gender Equality Analysis will be carried out with regard to positions with contractual pay in 2023.

**Non-discrimination**

**406-1** Incidents of discrimination and corrective actions taken

No incidents identified.

## Supplier social assessments

- |              |   |                      |
|--------------|---|----------------------|
| <b>414-1</b> | New suppliers that were screened using social criteria. | <b>Supply chains</b> |
|--------------|---|----------------------|

## Public policy

- |              |                         |   |
|--------------|-------------------------|---|
| <b>415-1</b> | Political contributions | VR Group does not support political parties, candidates or organisations. |
|--------------|-------------------------|---|

## Customer health and safety

- |              |   |  |
|--------------|---|--|
| <b>416-1</b> | Assessment of the health and safety impacts of product and service categories                 | The assessment of the health and safety impacts concerns 100% of VR Passenger Services products and services. In rail logistics, risk assessments are conducted customer-specifically in cooperation with the biggest customers, accounting for 75% of the service offering. At VR FleetCare, risk assessments of rolling stock safety are included in the rolling stock safety management system and they have been carried out comprehensively with regard to all rolling stock. |
| <b>416-2</b> | Incidents of non-compliance concerning the health and safety impacts of products and services | Number of written warnings concerning non-compliance with safety guidelines in Finland 13.   |

## Marketing and labelling

- |              |   |   |
|--------------|---|---|
| <b>417-3</b> | Incidents of non-compliance concerning marketing communications | No significant incidents of non-compliance. |
|--------------|---|---|

## Customer privacy

- |              |  |   |
|--------------|--|---|
| <b>418-1</b> | Substantiated complaints concerning breaches of customer privacy and losses of customer data | No significant non-compliance leading to sanctions. |
|--------------|--|---|



2-7

## Personnel figures

	2022	2021	2020
<b>FTE average, Finland (1)</b>	<b>5,704</b>	5,581	5,698
<b>Full Time Equivalents in Sweden – average, 1 Jul–31 Dec 2022</b>	<b>1,132</b>	–	–
Full Time Equivalents in other countries – average	10	39	120
Full Time Equivalents – average, total	<b>6,846</b>	5,620	5,818
Change, %	<b>21.8</b>	-3.5	-3.9
Total salaries and wages, Finland, EUR million	<b>323.1</b>	297.2	291.8
Total salaries and wages, Sweden, 1 Jul–31 Dec 2022, EUR million	<b>57.4</b>	–	–
Permanent employees (average) of the Group's personnel, % (2)	<b>97</b>	97	98.7
Fixed-term employees (average) of the Group's personnel, % (2)	<b>3</b>	3	1.3
Full-time employees (average) of the Group's personnel, % (2)	<b>91</b>	92	91.9
Part-time employees (average) of the Group's personnel, % (2)	<b>9</b>	8	8.1
Men, % of personnel	<b>81</b>	82	81
Women, % of personnel	<b>19</b>	18	19
Average age of personnel, years	<b>43.2</b>	43.2	43.1
Average duration of employment, Finland, years (2)	<b>10.2</b>	10.8	11.1
New employee hires, Finland (2) (3)	<b>962</b>	607	464
Terminations of employment, Finland (2) (3)	<b>867</b>	725	607
Total turnover, Finland, % (2) (3)	<b>14.1</b>	11	8.7

(1) FTE from SeaRail and Transitar added to FTE total (2022: 17, 2021: 17, 2020: 16). These FTE figures are not included in other personnel figures due to data unavailability.

(2) The figures do not include VR Transpoint's international operations.

(3) The turnover figures include both permanent and fixed-term employees. The name of the indicator is "Total turnover", but the average turnover is calculated.

2-7

## Personnel figures

	2022	2021	2020
<b>Retirements in Finland</b>			
Old-age pension, Finland, incl. years-of-service pension	<b>108</b>	113	136
Disability pension, Finland (4)	<b>15</b>	22	23
Average retirement age, Finland	<b>62.6</b>	61.7	61.4
Sickness-related absences as % of regular working hours, Finland (5)	<b>4.8</b>	4.6	4.4
Sickness-related absences as % of regular working hours, Sweden (5)	<b>8.9</b>	–	–
Lost-time injury frequency, Finland (total number of work-related accidents per million hours worked)	<b>8.6</b>	9.2	7.6

(4) Those retiring on disability pension after employment.

(5) The calculation method for sickness-related absences in Finland and Sweden is different, and the figures are not comparable.

2-7

## Personnel figures

### FTE by country

	2022	2021	2020
Finland	5,704	5,581	5,698
Sweden	1,132	1	0
Other countries	10	39	120
<b>Total, on average</b>	<b>6,846</b>	5,620	5,818

### Gender breakdown of personnel

	Finland, 2022		Sweden, 2022		Finland, 2021		Finland, 2020	
	Men	Women	Men	Women	Men	Women	Men	Women
Permanent, %	78.5	18.2	56.1	13.9	79.7	17.6	80.4	18.5
Fixed-term, %	2.7	0.5	25.2	4.7	2.3	0.5	0.7	0.5
Full-time, %	76.6	14.4	54.0	12.7	77.9	14.1	77.5	14.6
Part-time, %	4.7	4.3	27.4	6.0	4.0	4.0	3.7	4.3
Train drivers, number	1,133	62	260	66	1,108	59	1,150	60
Train drivers, %	95	5	79.8	20.2	95	5	95	5
Bus drivers, number	1,087	114	1,372	111	1,051	105	1,071	105
Bus drivers, %	91	9	92.5	7.5	91	9	91	9
Train crew, number	327	283	208	208	330	264	351	262
Train crew, %	54	46	50.0	50.0	56	44	57	43

2-7

## Personnel figures

### Age breakdown of personnel

	Finland, 2022		Sweden, 2022		Finland, 2021		Finland, 2020	
	Count	% of total	Count	% of total	Count	% of total	Count	% of total
<b>Train drivers</b>	<b>1,195</b>		<b>326</b>		<b>1,167</b>		<b>1,210</b>	
Under 30	47	4 %	27	8 %	44		58	5 %
30–50	1049	88 %	196	60 %	1,037	4 %	1,074	89 %
Over 50	99	8 %	103	32 %	86	89 %	78	6 %
<b>Average age, years</b>	40.6		44.9		<b>40.0</b>	7 %	39.1	
<b>Bus drivers</b>	<b>1,201</b>		<b>1,483</b>		<b>1,156</b>		<b>1,176</b>	
Under 30	65	5 %	36	2 %	73		63	5 %
30–50	506	42 %	668	45 %	477	6 %	515	44 %
Over 50	630	52 %	779	53 %	606	41 %	598	51 %
<b>Average age, years</b>	48.8		50.1		48.4	52 %	48.2	
<b>Train crew</b>	<b>610</b>		<b>416</b>		<b>594</b>		<b>613</b>	
Under 30	122	20 %	109	26 %	105		108	18 %
30–50	313	51 %	182	44 %	318	18 %	330	54 %
Over 50	175	29 %	125	30 %	171	54 %	175	29 %
<b>Average age, years</b>	40.9		46.4		42.0	29 %	41.7	



201-1

**Dividends, taxes and levies** (EUR million)

	2022	2021	2020
<b>Dividends</b>	<b>0.0</b>	100.0	100.0
<b>Returns of capital</b>	<b>40.0</b>	0.0	0.0
Income taxes	<b>-0.7</b>	0.4	2.9
Deferred taxes	<b>1.6</b>	-6.2	-8.3
<b>Direct taxes, total</b>	<b>1.0</b>	-5.8	-5.4
Track access fees	<b>39.9</b>	43.7	41.6
Track taxes	<b>0.2</b>	0.0	0.0
<b>Track taxes and track access fees, total</b>	<b>40.1</b>	43.7	41.6
Other taxes and levies	<b>0.4</b>	0.5	0.6
Vehicle taxes	<b>0.4</b>	0.1	0.1
Traffic electricity taxes	<b>0.0</b>	0.0	0.0
Fuel taxes	<b>13.4</b>	13.7	13.1
Other electricity taxes	<b>1.6</b>	1.9	1.5
<b>Energy taxes, total</b>	<b>15.0</b>	15.5	14.6
<b>Paid to the state, total</b>	<b>96.8</b>	154.1	150.9

	2022	2021	2020
<b>Property taxes</b>	<b>1.8</b>	1.8	1.6
Pension contributions	<b>59.5</b>	51.5	42.2
Other personnel-related expenses	<b>30.3</b>	11.6	7.0
<b>Employer's contributions, total</b>	<b>89.9</b>	62.8	49.2
Value added taxes (sales – purchases)	<b>-1.4</b>	-7.9	-74.5
Withholding taxes from salaries	<b>93.6</b>	72.6	72.1
<b>Taxes to be accounted for the financial year</b>	<b>92.3</b>	64.8	-2.3
<b>Total of everything</b>	<b>280.8</b>	283.4	199.4

401-1

## New employee hires and employee turnover

Employee hires	2022		2021		2020	
	Count	% of total	Count	% of total	Count	% of total
Men	670	70 %	462	76 %	328	71 %
Women	292	30 %	145	24 %	134	29 %
Total	962		607		462	
<b>By age group</b>						
Under 30	363	38 %	225	37 %	156	34 %
30–50	429	45 %	288	47 %	217	47 %
Over 50	170	18 %	94	15 %	89	19 %
<b>Terminations of employment</b>						
Men	645	74 %	507	70 %	408	67 %
Women	222	26 %	218	30 %	197	33 %
Total	867		725		605	
<b>By age group</b>						
Under 30	206	24 %	154	21 %	125	21 %
30–50	358	41 %	283	39 %	189	31 %
Over 50	303	35 %	288	40 %	291	48 %
<b>Overall turnover</b>						
		14.1 %		11.0 %		8.7 %

Includes new employee hires in Finland.

“Total turnover” is the ratio of employment relationships terminated during the year (both non-fixed-term and fixed-term) to the average number of personnel.

403-9

## Occupational safety in figures <sup>(1)</sup>

### Occupational safety at VR Group

Number of fatal accidents	0
Number of serious	12
Serious frequency (LTIF30)	1.2
Number of all accidents that have occurred (TRI figure) <sup>(2)</sup>	178
TRI frequency	17.1
Main types of accidents	slipping and falling
Hours worked	10,405,389

### Accidents involving outsiders at VR workplaces

Number	30
Number of serious	1
Main types of accidents	slipping and falling

(1) Working hours are calculated per million hours worked. The frequency includes all VR Group employees in Finland. Accidents are monitored based on the Finnish accident insurance system and corresponding accident decision and indemnity practice.

(2) TRI = Total Recordable Injuries.

2-9

## Diversity of governance bodies

Body	Count	% of total
<b>Supervisory Board</b>	<b>12</b>	
Male	7	58 %
Female	5	42 %
Under 30	0	0 %
30–50	7	58 %
Over 50	5	42 %
<b>Board of Directors</b>	<b>8</b>	
Male	5	62,5 %
Female	3	37,5 %
Under 30	0	0 %
30–50	3	37,5 %
Over 50	5	62,5 %
<b>Management Team of the Group</b>	<b>10</b>	
Male	7	70 %
Female	3	30 %
Under 30	0	0 %
30–50	7	70 %
Over 50	3	30 %
<b>All total</b>	<b>30</b>	



# Independent Assurance Statement

## To the Management and Stakeholders of VR Group

### Scope and Objectives of the Assurance

Ecobio Oy (hereafter Ecobio) has been commissioned by VR Group to perform a limited third-party assurance engagement regarding the sustainability information disclosed in the VR Group's Corporate responsibility report 2022 (hereafter "the Report") for the reporting period of January 1st to December 31st 2022. The assurance engagement was conducted in accordance with the international AA1000 Assurance Standard (AA1000AS v3, 2020) as a type 2 engagement.

The scope of the work included assurance of completeness and correctness of the information presented by VR Group in the Report. The objective of the independent assurance was:

- to evaluate VR Group's stakeholder engagement and responsiveness, the identification of material sustainability topics, as well as evaluation of VR Group's impacts;
- to evaluate the reliability and quality of the sustainability information and the compliance of reporting in accordance with the reporting principles and the updated requirements of the GRI standards.

### Responsibilities of VR Group and the Assurance provider

VR Group was responsible for the collection, preparation, and presentation of the sustainability information in the Report. The Management of VR Group has approved the information provided in the Report.

Ecobio, as an independent assessor, was not involved in the preparation of any disclosures, apart from the independent assurance engagement. Ecobio's responsibility is to present an independent conclusion on the sustainability information subject to the limited assurance engagement.

Ecobio disclaims any liability or responsibility for any third-party decision based upon this assurance statement.

### Methodology and Limitations

Ecobio based the assurance process on the following guidelines and standards: the Global Reporting Initiative (GRI) Standards, the AA1000 Assurance Standard AA1000AS v3, 2020 (type 2), and VR Group's internal reporting guidelines.

Concerning limited assurance engagements, the evidence-gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained. Due to the nature of sustainability information and the limitation of reporting procedures, it may be possible that not all errors or irregularities have been detected. Since the integration of the large business acquisition is still incomplete, the Report does not yet cover VR Sverige's sustainability information in its entirety.

This assurance engagement was conducted from November 2022 to February 2023. The assurance process included, among other things, the following procedures:

- Interviewing the senior management representatives to gain understanding of the material sustainability topics, impacts, risks and opportunities;
- Evaluating procedures in the identification of material topics, the stakeholder engagement and responding to stakeholders' expectations;
- Interviewing the employees responsible for data collection, calculations and reporting at VR Group;
- Evaluating the procedures for gathering, analysing, and aggregating quantitative data as well as performing cross-checks and calculations on a sample basis;
- Evaluating internal guidelines for data collection and the sufficiency of documentation of the data gathering process;
- Checking the consistency of the reported data compared to the guidelines.

## Conclusions

**Inclusivity:** VR Group engages in regular dialogue with stakeholders and is committed to stakeholder engagement in its processes. The stakeholders' interests serve as a basis for the identification and prioritisation of VR Group's material topics.

**Materiality:** VR Group has identified its positive and negative impacts and updated material sustainability topics, while considering stakeholders' interests and its major economic, environmental and social impacts.

**Responsiveness:** VR Group has policies and procedures in place to meet the expectations of stakeholders.

**Impact:** VR Group has identified direct and indirect impacts related to material sustainability topics. VR Group is committed to taking into account for the economic, environmental and social impacts of its operations in its decision-making. VR Group is also committed to taking measures to reduce negative impacts.

## Reliability of the corporate responsibility information

Based on the work described in this statement, nothing has come to our attention that would cause us to believe that the information presented by VR Group in the Report is not fairly stated, or that it would not comply with the reporting guidelines stated before.

## Observations and Recommendations

Based on the limited assurance engagement, Ecobio presents the following additional observations and recommendations:

- VR Group has established safety management practices. Systematic safety management and coherent safety information are prerequisites for continuous improvement in safety work in all operations. We recommend continuing the proactive development of safety culture at the group level.

- VR Group's integration of the large business acquisition is incomplete with regard to different areas of sustainability reporting. We recommend continuing the integration of sustainability work in Finland and Sweden and the development of goals and metrics, as well as continuing the development of a common corporate responsibility management.
- VR Group updated the material sustainability topics at the end of 2022 and recognised a need to highlight the strategic sustainability priorities. We recommend to continue developing the corporate responsibility report based on the updated material topics and to take into account the double materiality principle and other the legislative corporate sustainability requirements when grouping the material topics.
- The updated materiality analysis emphasised the protection of biodiversity as a new material topic. We recommend continuing the work with the assessment of biodiversity impacts and developing relevant procedures in addition to the preliminary biodiversity work at VR Group. We suggest to consider to use existing and developing frameworks, such as the science based targets for nature, the updated GRI standard for biodiversity and the biodiversity disclosures in the European Sustainability Reporting Standards.

## Assurance provider's Independence and Qualifications

Ecobio is an independent sustainable development expert services company with more than 30 years of history. Ecobio's assurors are skilled and experienced in environmental and corporate responsibility assurance and have good knowledge of industry related sustainability issues.

Ecobio has no financial dependencies on VR Group beyond the scope of this engagement that would conflict with its independence. Ecobio has conducted this assurance independently and impartial from VR Group, and there has been no conflict of interest.

Helsinki, 23rd of February 2023

### Ecobio Oy

**Taru Halla** (M.Sc.)  
Managing Director

**Terhi Valtonen** (M.Sc.)  
Senior Consultant



**VR GROUP**

**Corporate responsibility report 2022**

7 March 2023